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January 1979  
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Number 1

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# The Journal Of The Kentucky Medical Association



# THE MESSAGE OF TENSION

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hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.

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# MESSAGE FROM THE PRESIDENT

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**P**ERHAPS it is the Season, but during the past few weeks, my thoughts have led me to contemplate the other aspects of medicine apart from the problems we face; some self generated, and others imposed. The joy and the thrill of the practice of medicine remains unassailable. We have all experienced in our various practices the look of grateful parents, the thoughtful touch of the elderly, the exhilaration of a delivery, the thankfulness we feel when an acutely ill patient responds, and a multitude of other similar patient-physician relationships. Despite outside pressures and government intervention, these experiences remain untouched and lasting. The preservation of humanism in medicine is certainly in the patient's interest and this should be our charge and purpose. This is the appropriate Season to recall these attributes of medicine and renew our united efforts to see that they are preserved.

The Federation of Medicine through the county and state associations and the American Medical Association represent our united efforts in shaping the medicine of tomorrow. The Federation of Medicine welcomes all viewpoints from physicians and there is free access to individuals in this democratic process. I urge you to consider the positive aspects of an approach in which the art of medicine that we all agree upon can be promoted through a unified expression.

Have a happy and thoughtful New Year!

ROBERT S. HOWELL, M.D.



# POSTGRADUATE OPPORTUNITIES



## IN KENTUCKY

### JANUARY, 1979

- 11 Lecture on Bone Radiology by Freida Feldman, M.D., Guest Lecturer for Bluegrass Radiological Society, Albert B. Chandler Medical Center, Lexington. Contact James G. Lorman, M.D., Dept. of Diagnostic Radiology, U of Ky., Lexington, Ky. 40506

### FEBRUARY, 1979

- 8 Lecture on neuroradiology\*\*\* by Glen H. Roberson, M.D., Guest Lecturer for Bluegrass Radiological Society, Albert B. Chandler Medical Center, Lexington, Ky.
- 23-24 Symposium on Psychopharmacology\*, Health Sciences Center, University of Louisville School of Medicine.

### MARCH, 1979

- 5-9 Practical Microsurgery Symposium and Workshop\*\*
- 8 Bluegrass Radiological Society Lecture\*\*\*, "Pediatric Radiology." Armand E. Brodeur, M.D., Cardinal Glennon Memorial Hospital, St. Louis, Mo. (Lecture in Lexington.)
- 9 C. Dwight Townes Memorial Seminar\*\*
- 9-11 Advanced Cardiac Life Support\*\*
- 12-13 Neonatal Transport\*  
Hyatt Regency, Lexington
- 23-24 Rheumatology Symposium\*  
Hyatt Regency, Lexington
- 29 Common Skin Disorders\*\*

\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

\*\*For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

\*\*\*Contact James G. Lorman, M.D., Dept. of Diagnostic Radiology, A. B. Chandler Medical Center, Lexington, Ky. 40506

## APRIL, 1979

- 2-3 Medical Aspects of Sports\*  
Hyatt Regency, Lexington
- 20-21 Endocrinology for the Practicing Physician\*  
Hyatt Regency, Lexington
- 23-26 Surgical Anatomy\*\*
- 25-27 Advances in the Therapeutics of Internal Medicine (American College of Physicians)\*, Hyatt Regency, Lexington
- 26-28 High Risk Pregnancy\*\*
- 26-30 Modern Management of Major Problems in Surgery\*\*

## OCTOBER, 1979

- 20 Kentucky Regional Meeting, American College of Physicians, Hyatt House, Louisville.

## IN SURROUNDING STATES

### FEBRUARY, 1979

- 14-15 "Frontiers in Medical Ethics." Vanderbilt University School of Medicine, Nashville, Tenn. Contact: Marilyn Short, Div. of Continuing Education, Vanderbilt University, Nashville, Tenn. 37203.

## OROPHARYNGEAL CANCER SYMPOSIUM

### FEBRUARY 10, 1979

Health Sciences Auditorium,  
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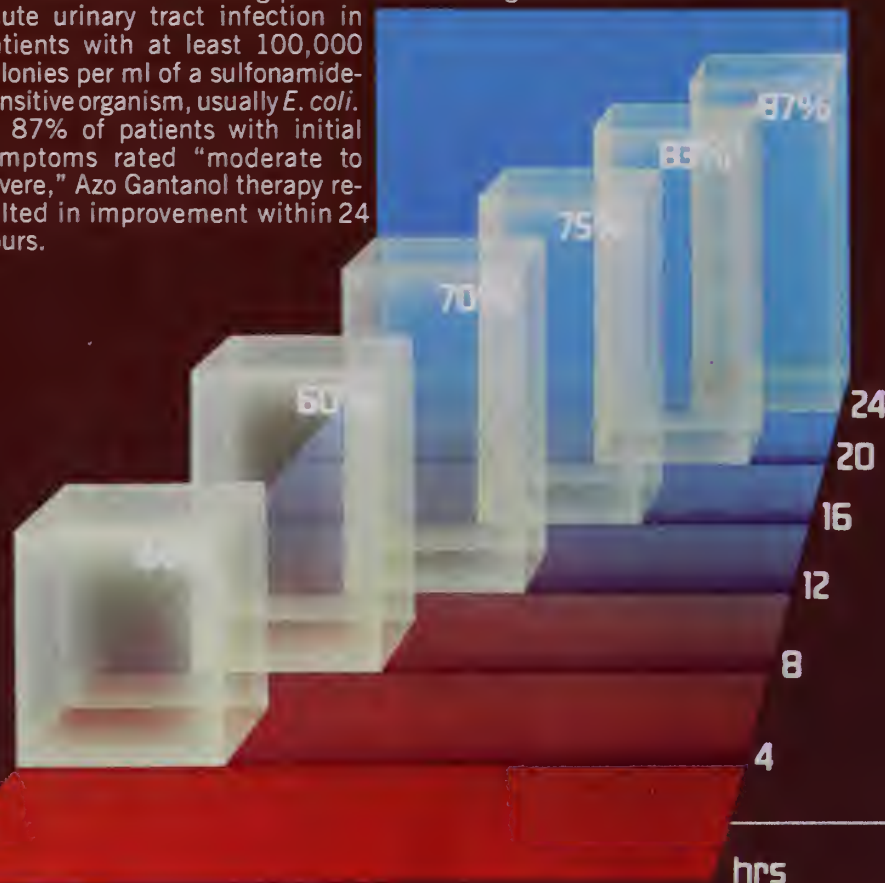
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**Precautions:** Use cautiously in patients with impaired renal or hepatic function, severe bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalline stone formation.

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# *The* JOURNAL *of the* Kentucky Medical Association

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VOLUME 77

JANUARY 1979

NUMBER 1

## Male Breast Carcinoma Following Estrogen Therapy: Report of a Case

Giriappa Srinivasan, M.D., Usha Srinivasan, M.D., and S. Philip Greiver, M.D.

Louisville, Kentucky

Lacassagne in 1932 demonstrated that estrogen administration increases the incidence of breast cancer in male mice to the level normally found in the females of the strain. Since then, estrogens have been suspected to have carcinogenic potential on the male breast. This communication is a case report of primary breast carcinoma occurring in a male following prolonged estrogen therapy for prostatic carcinoma. Review of the literature revealed only seven reported cases of primary breast carcinoma following prolonged estrogen therapy.

### Report of a Case

**A**N 83-year-old male was admitted to the hospital with the chief complaint of breast enlargement. About 3½ years prior to admission he was diagnosed to have Stage-D prostatic carcinoma. A transurethral resection of the prostate was performed and he was placed on 2 mg of Diethylstilbestrol daily. He noted enlargement of both breasts beginning six months prior to admission, the left being larger than the right. There was no history of pain, discharge per nipple or weight loss. Past history was negative

for trauma, radiation or other breast disease. Family history for breast cancer was negative. Physical examination revealed a well developed, normotensive black male. Right breast was 4.5 cms in diameter, soft to palpation and there were no nodules. Left breast was 7 cms in diameter and there was a 3 x 3 cms firm nodule in the upper outer quadrant. The nodule was fixed to the skin but not to the chest wall. There was no lymphadenopathy. Examination of lungs, heart and abdomen was unremarkable. A Technetium 99m bone scan showed areas of increased radioactivity in the lumbar and thoracic spines, left lower ribs and left ischium. Bone marrow aspirate was negative for malignant cells. The patient underwent bilateral simple mastectomy. Gross and microscopic examination of the right breast showed changes consistent with gynecomastia. Gross examination of the left breast revealed a 2 x 3 cms grayish-white nodule with an ill-defined border. Histological examination showed mucinous carcinoma (Figure 1).

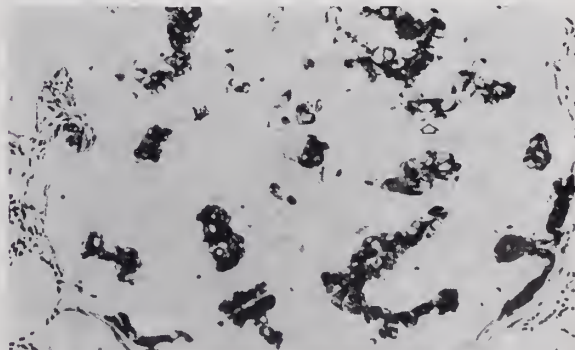


Figure 1. Histological section from left breast showing clusters of neoplastic cells floating in amorphous mucinous material. There is glandular formation in some areas. (H & E stain, magnification x200).

*Doctors Giriappa Srinivasan and Greiver are from the Division of Internal Medicine, Department of Medicine, University of Louisville School of Medicine, Louisville, Kentucky. Doctor Usha Srinivasan is from the Pediatric Hematology and Oncology Division, Department of Pediatrics, University of Louisville.*

*Received at KMA 10-11-78.*



### Comment

Carcinoma of the male breast is a rare neoplasm accounting for less than 1.5% of all malignant tumors in the male.<sup>2,3</sup> Hormonal factors have been shown to have an important role in the pathogenesis of breast cancer. Likienfeld has shown that men with breast cancer have had orchitis, orchidectomy, radiation or other breast disease much more commonly than the matched controls.<sup>4</sup> An increased incidence of breast cancer has been noted in Klinefelter syndrome.<sup>5</sup> Men with breast cancer are known to have high 16-alpha-hydroxylase activity, resulting in increased estriol formation from exogenous estradiol.<sup>6,7</sup> These patients are also known to excrete significantly higher levels of endogenous estrogens, probably of testicular origin.<sup>8</sup> Recently, estrogen receptors have been demonstrated in male breast cancer<sup>9</sup> and experimental studies have shown that prolonged exposure of tissues containing estrogen receptors to high concentrations of endogenous or exogenous estrogens, with high binding affinity for the receptor, may lead to enhanced biosynthetic activities and excessive resynthesis of estrogen receptors by the nucleus. Such an excessive "priming" of the tissues may result in malignant transformation if they are exposed to mutagenic agents early in life<sup>10</sup> (Figure 2). Carcinoma of the male breast has been observed in men given estrogen for palliative management of prostatic cancer, carcinoma of the bladder, etc. in at least eight cases, including ours (Table). Possibly, many others have occurred. Our patient had received a total of 2190

mg of stilbestrol over a period of 36 months. The total dose of stilbestrol received prior to development of breast cancer in other reported cases was 1770 to 4060 mgs.

We conclude that the exact relation between male breast cancer and estrogen therapy is still a matter of debate. However, there are some experimental and clinical evidences to indicate the development of carcinoma in the male breast after prolonged estrogen administration. Although such an occurrence is rare, the possibility should be kept in mind and any suspicion of breast tumor in such a patient should be promptly investigated.

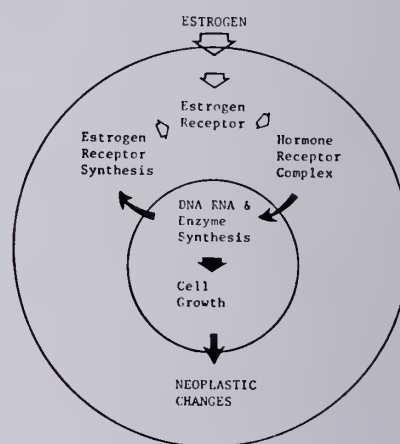


Figure 2. Diagrammatic representation of the proposed mechanism of carcinogenesis by estrogens in cells exposed to mutagens early in life.

(References on page 48)

**TABLE**  
Reported cases of male breast cancer following estrogen therapy. (10-11)

| Sources       | Patient's Age | Condition Treated | Total Dose of Stilbestrol Given in mg |
|---------------|---------------|-------------------|---------------------------------------|
| 1) Abramson   | 51            | Ca Prostate       | 4,000                                 |
| 2) Howard     | 71            | Ca Prostate       | 4,060                                 |
| 3) Corbett    | 65            | Ca Prostate       | 3,240                                 |
| 4) McClure    | 56            | Ca Bladder        | 1,770                                 |
| 5) Graves     | 78            | Ca Prostate       | 4,400                                 |
| 6) Symmers    | 30            | Transsexualism    | Not Known                             |
| 7) Symmers    | 30            | Transsexualism    | Not Known                             |
| 8) Srinivasan | 83            | Ca. Prostate      | 2,190                                 |

# A Clinical Approach to the Choice of Antimicrobial Agents

H. F. Wunderlich, M.D., M. J. Raff, M.D., and J. C. Melo, M.D.

Louisville, Kentucky

The following is the first of a series of articles that attempt to provide the practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. Rather than provide long lists of drugs, their pharmacokinetics, toxicities, etc., we have chosen to present this in the form of actual case histories. The clinical data has been condensed as much as possible and choices of antimicrobial agents will allow the readers to attempt to establish a diagnosis and institute the therapy they deem most appropriate. This will be followed by explanations of why we felt the answer we listed as being correct was the best choice. As in other areas of medicine, our choices may not always be correct for everyone and we will welcome correction and discussion.

## Case Number 1. Pneumococcal Pneumonia

A 61-year-old white male was seen by his family doctor one week previously complaining of malaise, myalgias, sore throat, rhinorrhea and headache. He now presents with a febrile illness of three days duration antedated by a single shaking chill. He has a cough productive of purulent sputum, left pleuritic chest pain, and mild dyspnea. The patient appears moderately ill and tachypneic and complains of a left frontal headache and photophobia. He is nauseated and has vomited once. His temperature is 103.6°F, pulse 108/min, respirations 28/min,

and blood pressure 108/70 mm Hg. Rales are audible in the left lung and left lower lobe infiltrate appears on chest x-ray. The WBC count is 18,400/mm<sup>3</sup> with 86% neutrophils and 6% bands. Gram stain of sputum reveals gram positive cocci with abundant polymorphonuclear leukocytes. Lumbar puncture yields clear CSF which contains 3 neutrophils and 2 lymphocytes/mm<sup>3</sup> with a protein of 40 mg/dl and a glucose of 40 mg/dl. His serum glucose drawn simultaneously is 98 mg/dl. Just before instituting therapy, the patient reminds you that he once developed generalized urticaria following the administration of penicillin. Which of the following choices of therapy would be most appropriate?

- A. tetracycline 500 mg po q 6h
- B. cephalothin 1 gram IV q 6h
- C. clindamycin 300 mg IV q 6h
- D. chloramphenicol 1 gram IV q 6h
- E. ampicillin 1 gram IV q 6h

Answer D. chloramphenicol

His physician admits the patient to hospital and places him on cephalothin. He promptly defervesces only to relapse 96 hours later with lethargy and a recrudescence of temperature to 103°F. A repeat lumbar puncture yields CSF containing 73 WBC's/mm<sup>3</sup> (38% neutrophils and 62% lymphocytes) protein 65 mg/dl, and glucose 15 mg/dl. Gram stain reveals several gram-positive cocci but there is no growth from cultures of blood or cerebrospinal fluid.

Which of the following drugs should now be used?

- A. erythromycin
- B. clindamycin
- C. tetracycline
- D. chloramphenicol
- E. continue cephalothin

Answer D. chloramphenicol

This patient has an apparent pneumococcal pneumonia. He also exhibits several signs of

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central nervous system (CNS) infection (headache, photophobia, nausea and vomiting). Changes in sensorium or nuchal rigidity are not present in all cases of bacterial meningitis<sup>1</sup>.

This case illustrates the importance of knowing the CNS penetration of different antimicrobial compounds. The failure to recognize the importance of the minimal cerebrospinal fluid changes and complaints of headache, photophobia and nausea and vomiting may have led to an erroneous choice of antibiotics.

In the first question, among the choices, A is incorrect. Tetracyclines do not pass through the CNS blood-brain barrier well and a significant percentage of strains of *Streptococcus pneumoniae* (pneumococci) are resistant to tetracyclines.<sup>2</sup> Answer B, cephalothin, was chosen and induced an early response of the pneumonia and partial treatment of the meningitis as evidenced by the repeat CSF findings. Because cephalothin does not cross into the CSF well<sup>3</sup>, the patient's pneumonia was treated effectively but he continued to develop meningitis. Answer C, clindamycin, also does not cross the blood brain barrier.<sup>3</sup> Answer E, ampicillin, is incorrect because ampicillin is a penicillin derivative and therefore is inappropriate in the penicillin-allergic patient. All penicillins will cross-react with each other and the prior urticaria suggests the strong possibility of an anaphylactic reaction. Answer D, chloramphenicol, is the correct choice in this instance. Chloramphenicol enters the CSF even in the absence of meningeal inflammation, and is quite effective against the pneumococcus. The idiopathic aplastic anemia reported to occur with chloramphenicol on rare occasions (1 in >40,000 patients) appears to occur even less often or never with the intravenous form of the compound.<sup>4</sup> Chloramphenicol will not cross-react and therefore is safe in penicillin-allergic patients. It would also have been the drug of choice if the patient had been previously given antibiotics and you were not certain as to the

etiologic agent. This is because chloramphenicol will usually be effective against all the major species of bacteria producing meningitis (pneumococci, meningococci, *H. influenzae*, *Staph. aureus* and Beta-hemolytic streptococci).

In the second series of responses answer A, erythromycin, is a possible but not preferable choice over answer D, chloramphenicol, again the correct choice. Erythromycin requires substantial and potentially phlebotic dosages by the intravenous route in order to attain therapeutic levels in the CSF and even then does so only in the presence of active meningeal inflammation.<sup>5</sup> The choices of tetracycline or clindamycin are incorrect for reasons already discussed above. Cephalothin (Keflin®) and most of the other cephalosporins do not penetrate to the CSF in adequate concentrations to have clinical efficacy. In fact, meningitis has been reported to develop while the patient was being treated with cephalothin despite *in vitro* sensitivity of the bacteria to the drug. This may not be true for cephamandole (Mandol®) which has been shown to penetrate the CSF in therapeutic concentrations. However, even this compound has resulted in therapeutic failures against sensitive organisms.<sup>6,7</sup> The ability to diagnose and treat CNS complications of pneumococcal infections adequately may prevent serious morbidity and mortality.

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# An Unusual Presentation of Extracranial Cerebrovascular Disease

G. F. Meier, M.D., P. R. Dominguez, Jr., M.D., and Roy J. Meckler, M.D.

Madisonville, Kentucky and Louisville, Kentucky

This is a detailed case report of an unusual presentation of a progressing stroke secondary to extracranial vascular occlusive disease in which early computerized scan (C.T.) failed to aid in the diagnosis.

CEREBROVASCULAR disease is the third leading cause of death in the United States and the cause of untold morbidity. It has been estimated that up to 40% of patients with ischemic stroke have their principal occlusions confined to the extracranial vasculature. The "typical" clinical syndromes of cerebrovascular insufficiency vary widely, depending upon the vessels involved, portions of the brain affected, and manifest mild to severe signs and symptoms. Presentation of the following case, however, seems so unusual as to warrant its detailed description.

## Case Presentation

This 52-year-old, right-handed woman first presented at the Trover Clinic on 11-16-77 with a history of right back and leg paresthesias of one week's duration. The patient was evaluated in the Orthopaedic Department and found to have one-inch calf atrophy on the right, without any demonstrable weakness or sensory loss, despite the fact that she was complaining of numbness on the lateral aspect of her leg. Lumbosacral spine x-rays taken that day showed a transitional L5 vertebra and an old compression fracture of T12 sustained in a horseback riding accident at the age of 20. She was placed on Motrin, Vitamin B-12, given a Kenalog injection and asked to return in 10 days. She returned in two days, however, with painless weakness of her right leg, which began approximately 24 hours before. Neurologic examination at that time was

entirely within normal limits, except for the weakness of her right leg, mainly distal, with complete right footdrop. The deep tendon reflexes were 2+, without abnormal reflexes, and there was no sensory loss. She had no bowel or bladder complaints. Carotid pulses were equal, and there were no carotid bruits. She was admitted to the hospital and underwent a T10-S2 myelogram, which showed a small hourglass defect at her compression fracture of T12, but certainly insignificant considering the profound weakness. CSF examination showed no cells and a protein of 47 mg%, with a normal protein value of 15-45 mg%. On the following day she underwent a C.T. scan of her brain, with and without contrast, which was normal (Figure 1). Other laboratory studies during this time included a 4-hour glucose tolerance test, ANA, UA, porphobilinogen, CBC, sed rate, electrolytes, LDH, CPK, and SMA-12, all of which were normal. EKG showed sinus bradycardia with a question of old anteroseptal myocardial infarction for which there was no prior history.

Clinically, she remained the same until 11-25-77, six days after admission, when she was noted for the first time to have a right Babinski sign. The weakness of her leg continued to be about the same, primarily distal. She was transferred to Evansville, Indiana, for a medical Neurology evaluation and EMG nerve conduction studies



Figure 1. Normal C.T. scan, 14 days after onset of symptoms, 4 days after admission to hospital.

Doctors Meier and Dominguez are from the Trover Clinic, Madisonville, Kentucky. Doctor Meckler is from Louisville, Kentucky.  
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on 11-29-77. It was felt by the Neurology consultant that the patient had late-onset multiple sclerosis, with her EMG nerve conduction studies suggesting an upper motoneuron lesion. It was suggested that we obtain a protein electrophoresis and IGG studies and start her on Prednisone. Since her previous myelogram had only been carried to T10, a second complete myelogram was performed and spinal fluid collected for the above studies on 12-1-77. The myelogram again was entirely within normal limits, and the CSF study showed protein electrophoresis gamma globulin of 7.9, with 7 as the upper limits of normal. Immunoglobulin G was slightly elevated and the protein was 49 mg%, again with normals being 15-45 mg%, and she was started on steroids.

Because of the severity of her weakness and rather inconclusive diagnosis, it was decided to send the patient to Louisville, Kentucky, for a second medical Neurology opinion. She was transferred to Louisville on 12-5-77, but on 12-3-77, she was noted for the first time to have slight right arm weakness, and on the following day was found to have paralysis of both legs and right arm. Her reflexes remained equal, 2+, but with bilateral upgoing toes. She had no cranial nerve signs and no bowel and bladder dysfunction at this time. When transferred to Louisville on 12-5-77 she was starting to develop a mild expressive dysphasia. On the following day in Louisville she had an increase in her dysphasia, with a right central facial weakness noted for the first time. The repeat C.T. scan of the brain on 12-6-77, approximately 12 days after her first C.T. scan and 28 days after the onset of her symptoms, showed bilateral posterior frontal parasagittal lesions of low density, approximately 4 cm. in diameter, that had not been previously seen (Figure 2). An EEG was performed and was normal. A technetium flow scan showed no flow in the left internal carotid artery distribution, and a femoral catheter angiography study on 12-9-77 showed mild arteriosclerotic narrowing at the base of the innominate artery. There was a lucency in the midportion of the common carotid artery on the right side, which on subtraction was felt not to represent a defect. There was a moderate stenosis in the midportion of the right vertebral artery. The proximal left subclavian artery was mildly stenotic, and the left



Figure 2. Abnormal C.T. scan, 27 days after onset of symptoms, 13 days after initial C.T. scan.

carotid artery was totally obstructed. The anterior cerebral artery on the right side did not fill from the right carotid injection. No displacement of the internal cerebral veins was noted. Arterial phase was felt to be slightly slow, but no abnormal veins were seen to drain from the region. On right vertebral angiogram there was a prompt filling of the middle and anterior cerebral circulations through a large posterior communicating artery, with a lack of vessels in the midline and mid and posterior parietal regions, that subsequently filled by collateral circulation. Both of the anterior cerebral arteries filled from the left side of the circulation by the posterior collateral flow and all that were normally supplied by the left carotid artery were completely occluded (Figures 3 and 4).

### Discussion

The diagnosis of extracranial cerebrovascular disease with cerebral infarction to both right and left anterior cerebral artery distributions and the left middle cerebral artery distribution was made. The patient was subsequently transferred to a rehabilitation center. Presentation of this case is very unusual even for a progressing stroke.<sup>1</sup> The length of time from the initial symptoms to the final state was over three weeks, with a period of relatively stable neurologic dysfunction lasting about six days. In retrospect, the diagnosis could have been made earlier with an earlier flow scan or angiography, but with symptoms primarily of a monoparesis, no carotid bruits heard, normal C.T. scan, and the abnormality in the patient's CSF findings at the time, these were not strongly considered.<sup>2</sup> Treatment of this patient and her





Figure 3. Carotid angiogram fills only (R) middle cerebral artery.



Figure 4. Right vertebral angiogram fills all other intracranial vessels through large posterior communicating artery.

ultimate outcome would indeed remain the same, even with earlier diagnosis. However, with the frequency of cerebral extracranial vascular disease and the possibility that surgical intervention in some cases might be of benefit, a high index of suspicion even in unusual presentations such as this must be maintained.<sup>3</sup>

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## Colposcopy

Colposcopy is the visualization of the cervix through an optical system that magnifies the cervix 10 to 16 times. It was first used in Germany in 1925, and in the last 15 years has become widely used by gynecologists in this country. A great deal of detail of the living structure of the cervix can be seen through the colposcope, and it is a very valuable tool in the treatment of abnormalities of the cervix. It is used by some as a screening technique, but most physicians use it only in patients who have an abnormal or suspicious cytologic smear or a suspicious appearing cervix. The chief value of the colposcope is that it allows you to do direct biopsies of the cervix following visualization of the abnormal areas.

Colposcopy, like many medical procedures, requires practice and study. There are numerous postgraduate courses available for both the beginner and the more experienced colposcopist. The inexperienced colposcopist must be willing to look at the cervix of many patients before he becomes comfortable with the procedure.

There are two basic types of examination, the screening exam involving primarily inspection of the cervix and the visible portion of the endocervix, and the more intensive examination involving inspection of the cervix, endocervix, the vaginal fornices, and the entire vaginal barrel as well. The exam may take as little as three minutes or as long as 20 to 30 minutes depending upon the patient, the extent of the abnormalities present, and the examiner.

It is imperative that the squamocolumnar junction be completely visualized if the exam is to be satisfactory, since it is in this area that atypical cervical epithelial changes are first noted.

The technique of colposcopy and the classi-

fication of the changes noted in the cervix are readily available in several texts; among those the books of Stafl and Drexeus.<sup>1,2</sup>

The most important advantage of colposcopy has been in the reduction of cold conizations of the cervix. Not all physicians agree with this, but most experienced colposcopists feel that 50% to 75% of all conizations may be avoided in the patient with an abnormal Pap smear.

If the squamocolumnar junction has been visualized and the endocervix curetted by the colposcopist, conization may be avoided. Obviously, dependence upon the colposcope will depend upon experience.

Cervical conization will still be necessary in many patients depending upon their age, parity, desire for future pregnancies, the extent of the lesion and whether or not they have had a lesion recur after treatment. At present, a number of patients with carcinoma in situ and/or severe dysplasia of the cervix are being treated with directed biopsy and cryotherapy. At the present time, there is not a definitive answer as to whether or not this is the best course of therapy.

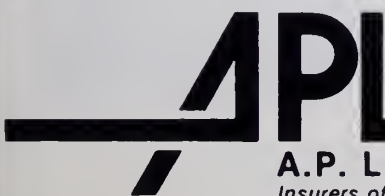
Colposcopy is a very useful tool, but like other medical procedures, must be used only as an adjunct in the total care of the patient.

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*Editor's Note: The CME Committee is revitalizing the CME section of the Journal with periodic reports from specialty societies about new and innovative concepts being used within the specialties. The articles also will include the clinical application recommended with described procedures. CME articles will be informative, yet short and concise.*

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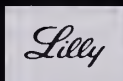
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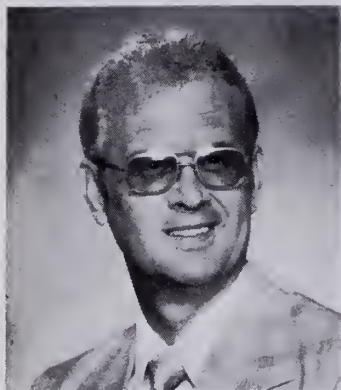
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## SPECIAL ARTICLES

### KENTUCKY MEDICAL INSURANCE COMPANY:

#### An Investment In the Future of Kentucky Medicine

#### An Interview with Riley Lassiter, Executive Vice President of KMIC



Riley Lassiter,  
Executive  
Vice President  
of KMIC.

**Q. Could you give us some background on the formation of KMIC? Why did the physician leaders in Kentucky feel it was needed?**

A. The House of Delegates of the KMA voted to organize the Kentucky Medical Insurance Company in September, 1977, and the KMA Board of Trustees formally established the KMIC in March, 1978. KMA then organized the KMA Insurance Agency, Inc., to market medical professional liability insurance policies until KMIC achieved capitalization. An agreement was reached in June, 1978 with the Physicians Insurance Company of OHIO (PICO) which began to offer medical professional liability insurance to Kentucky physicians immediately. When KMIC is adequately capitalized and received its Certificate of Authority, it will take over the PICO policies as well as write new ones.

The physicians in Kentucky formed KMIC to assure that they would always have access to adequate professional liability insurance coverage at reasonable rates, based on the experience of Kentucky physicians. Recent fluctuations in rates and types of coverage available in the Kentucky market mandated decisive action on the part of Kentucky physicians to take matters into their own hands. KMA believes that the formation of KMIC will allow physicians to control their own

destiny in the insurance field, and ensure a stable future climate for the practice of medicine in the state.

**Q. Mr. Lassiter, KMIC has been in operation for several months. Could you give us a progress report?**

A. We are very optimistic at this point about the future of the Kentucky Medical Insurance Company. Although promotion of our stock sale has only been underway since approximately October 1, we are making steady progress and at the time of this interview (December 14), stock sales amount to nearly \$400,000. Our capitalization requirement is \$1,240,000, so we do have to continue our strong marketing efforts. Shares sell for \$500 each, and we want to commit every Kentucky physician to purchasing at least one share. I know physicians will agree this is a small amount to pay to invest in a secure future for Kentucky medicine. Physicians must purchase stock before they are issued policies, so our insurance sales effort is also aiding our capitalization efforts. We do want to achieve capitalization at the earliest date possible. At this time, we are already detecting an enthusiastic response for this project, statewide, and momentum is building daily.

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**"... we are already detecting an enthusiastic response for this project, statewide, and momentum is building daily."**

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**Q. What are your goals for the immediate future?**

A. In January, KMIC begins a concerted marketing campaign which we've entitled "Buy Your Share—Show You Care." The goal, as I mentioned earlier, is to commit every Kentucky physician to the purchase of at least one share of KMIC



stock, whether or not the physician intends to become a policyholder. Our physician representatives throughout the state will be contacting their peers, and a number of educational mailings will focus on the opportunities and benefits that KMIC offers. Reports on stock sales will be mailed to all KMA members monthly showing sales progress in each KMA district. The goal of the campaign is to achieve capitalization as soon as possible, and with the strong support of our physician leadership, I feel certain we will be operational in early 1979. It is obviously no longer a question of "if" we capitalize, but simply of "when."

**Q. Could you give us some background on your management team? Why are they uniquely qualified to be involved in the formation of KMIC?**

A. As you know, I was the Kentucky representative for the Medical Protective Company for 19 years, with most of my experience in the area of sales, claims prevention, claims investigation and management. Don Chasteen, my assistant was an area representative with Blue Cross/Blue Shield before joining the KMA staff almost two years ago. At KMA, he served as Director of Public Affairs and was KMA's legislative representative in Frankfort. Shirley Roessler, a member of our professional staff, came with us after nine years with the Kentucky Medical Association. In addition to other responsibilities with KMA, she served as Executive Secretary of the Rural Kentucky Medical Scholarship Fund.

**Q. What type of coverage will KMIC offer?**

A. There is a choice of two primary policy limits: \$100,000 per claim/\$300,000 aggregate and \$200,000/\$600,000. Excess coverage of \$1 million over the \$200,000/\$600,000 policy is also available.

These coverages are of the "occurrence" type, which applies to claims reported during or after the policy period arising out of the performance of professional services during the policy period.

Tail coverage for claims discovered after termination of a previous claims-made policy is also offered. Corporation and partnership coverage is provided at no charge for both primary and excess coverage if all members are policyholders.

**Q. Could you explain the relative benefits of an occurrence vs. a claims-made policy?**

A. Yes. When a physician purchases a professional liability insurance policy on a claims-made basis, he buys a contract that states that the insurer will protect against claims on inci-

dents occurring in that year, provided the claims are filed in that year. If the physician chooses not to renew with that claims-made carrier in the second year, he must then purchase a "tail," which is a policy or an endorsement to a policy providing coverage to the physician in case a claim should be paid in the future on an incident which occurred in the contract year.

If a physician renews with the claims-made carrier for two or more years, two things happen. His premium cost begins to escalate because in the second and third years of a claims-made policy the carrier has a two or three year exposure instead of a one-year exposure. Secondly, the longer the physician remains with the claims-made carrier, the larger his "tail" or get-out price is going to be. A physician normally pays a small percentage of an occurrence policy premium in the first year of a claims-made policy, because statistically, few of the claims occurring are filed against physicians within the first contract year. In a second year of a claims-made policy, that percentage jumps because now the carrier is exposed to losses that may have occurred in the first or second year. This progression happens for five years, at the end of which time the physician is paying over 100% of the basic occurrence policy.

Unfortunately, most physicians do not realize that the tail coverage costs are based upon the percentage difference between the claims-made policy premium paid and the premium the physician would have paid if he had purchased an occurrence policy. This means that if the claims-made policy costs a small fraction of an occurrence policy, the physician will ultimately be required to pay a large fraction in order to obtain full coverage. The total cost of a tail endorsement after only a few years in a claims-made program may exceed 100% of the then filed occurrence rate and unless the physician who had claims-made coverage purchases a tail endorsement he or his estate may be completely without coverage upon his death or retirement. You can see that low cost insurance is not always the bargain it seems.

There is no way to predict what the occurrence cost will be in two, five or ten years and thus the physician, by working within a claims-made structure, will find himself in a posture which would not have been necessary if he had purchased an occurrence policy in the beginning.

**Q. How are rates going to be determined?**

A. KMIC rates will be based on the best statistical data regarding loss experience that is available. Right now, the best source for this data is the Insurance Services Office (ISO), which collects loss and premium experience by all companies operating in each area. Data obtained from ISO is being evaluated and analyzed by our actuarial service who then suggest appropriate rate levels. Our risk classifications have also been developed by ISO, but may be modified to reflect current needs in Kentucky, subject to the approval of our Insurance Commissioner.

In the long run, the most effective mechanism for developing a rate structure will be for KMIC to use its own experience and that will take a minimum of three years of data collection. The accumulation of data for professional liability is not as easy as for other lines of insurance, because of the slow maturing and reporting nature of claims.

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**"Even though the KMIC has not yet been capitalized, Kentucky physicians have already profited from their efforts to establish a physician-controlled insurance company."**

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**Q. Why is KMIC a good investment?**

A. KMIC must be considered a long term investment in the future of Kentucky physicians. By providing a stable source of insurance, KMIC will enable physicians to practice without fear of the arbitrary withdrawal of insurance protection in the event of another downward trend in the malpractice cycle.

KMIC will also provide the competition necessary to keep rates of other companies at their lowest possible levels. From an observation of rate levels of states in which there are physician controlled companies, commercial carriers tend to reduce or maintain their rates in the face of such competition. For example, several companies have either maintained or reduced rates in Ohio, where the Physicians Insurance Company of Ohio (PICO) has been established, while in other states where there is no physician-controlled entity, rates have been increased. (Medical Protective has raised its rates 15% this year in Indiana).

Also, of course, we expect KMIC to be successful and to generate a profit. This profit would be returned to the owners of the company—the Ken-

tucky physicians. For the details of the financial aspects of the Company, a physician should consult the offering circular. PICO, for example, has recently declared a policyholder dividend of 10% and their Board of Directors is considering a shareholders dividend. Rate reductions will tend to follow more slowly, since they must be supported by data acquired over an extended period of time. Such returns on an investment can cause stock to appreciate in value.

**Q. How has the concept of establishing a physician-controlled company in Kentucky affected the medical professional liability insurance market?**

A. Even though the KMIC has not yet been capitalized, Kentucky physicians have already profited from their efforts to establish a physician-controlled insurance company. Such an entity stimulates competition, which ultimately benefits the physician by encouraging the lowest possible rates.

Certainly the market is now more favorable than it was even a year ago. Major competitors have responded to the change in market conditions by either reducing their rates, increasing the limits of liability offered, or altering their partnership/corporation charges. They are now actively soliciting your business, and in November a major carrier here announced a rate reduction of 20% and the removal of partnership/corporation charge. Such actions have been noted in most areas where physician-controlled companies have been established.

While these other insurance companies may be currently seeking your business, their continued interest is not assured in the event of another malpractice crisis. The advantage of a physician-controlled company should this occur is obvious.

**Q. Some physicians say the malpractice crisis is over, and that the need for a physician-owned insurance company isn't readily apparent. How do you respond to this position?**

A. First, I would point out that perhaps we've all forgotten to some extent how difficult that crisis in 1975 was for many physicians. Doctors were placed in positions perilous to both their economic security and their medical practices.

Another crisis may indeed occur in the near future. As most insurance professionals know, these periods of crisis are cyclical, and if one is bad, the next may be worse. Physicians should



not become too comfortable with the present situation. It could change at any time. Industry experts are already predicting the next big downturn in terms of unprofitable underwriting. This cycle, which has happened historically about every 7 or 8 years, will be expected again in the early 1980's, if not sooner. That means that insurance companies not owned by physicians may very well, as they historically have, increase rates dramatically again or they may curtail their writings. Either way, at that time Kentucky physicians will need their own company.

#### **Q. Why do you think KMIC will succeed?**

A. I believe KMIC will succeed for many reasons, but primarily because I have faith in the support of Kentucky physicians of the concept of having their own company. Physicians are unique both as individuals and as a group. They are highly intelligent and determined, or they would never be where they are. Historically, when Kentucky physicians have gotten together behind an issue or project, look out—there's no stopping them. And Kentucky physicians are now convinced of

the advantages of a physician-owned company both for stability and to ensure the lowest possible rates.

The malpractice issue has united physicians as no other issue has in the past decade. Doctors are mad because they feel they've been taken advantage of, and they're right. It's no coincidence that the idea for physician-owned insurance companies sprang up in medical association meetings nationwide in 1976 and 1977, because doctors everywhere felt the same. Many of these ideas have taken root, and physician insurance companies have been organized in a number of states very successfully. Our neighbor physicians in Ohio and Tennessee and other states provide outstanding examples. In two years, PICO has become the largest underwriter of medical professional liability insurance in Ohio, providing coverage for nearly 3,800 physicians, and holding assets of over \$41 million. We are fortunate in being guided by PICO's expertise in our formative stages.

I feel sure that the physicians of Kentucky realize what a superb opportunity they have in KMIC, and what an important investment it can become. With all the positive factors working for us, I don't see how KMIC can fail.

## **MANUSCRIPT INFORMATION**

*Manuscripts will be accepted for consideration with the understanding that they are original and are contributed solely to The Journal. They should be submitted in duplicate, typed with double spacing, and should usually not exceed 2,000 words in length.*

*A synopsis-abstract must accompany each manuscript. The synopsis should be a factual (not descriptive) summary of the work and should contain: 1) a brief statement of the paper's purpose, 2) the approach used, 3) the material studied, and 4) the results obtained. The synopsis should be able to stand alone and not merely duplicate the conclusions.*

*References should be cited consecutively in the text and should contain, in order, the author, title of article, source, volume, inclusive page numbers, year. Journal abbreviations should conform to the Index Medicus. The*

*Journal of KMA does not assume responsibility for the accuracy of references used with scientific articles.*

*All scientific material is reviewed by the Board of Editors and publication of any article is not to be deemed an endorsement of the views expressed therein. The editors may use up to six different illustrations with the essayist bearing the cost of all over three one-column halftones.*

*Arrangements for reprints of an article are made with the printer and order forms are sent to all authors at the time of publication. When revisions and alterations not on the original copy are made by the authors on the galley proofs, a charge will be made to the authors.*

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## BRIEF SUMMARY OF PRESCRIBING INFORMATION

### **ANTIMINTH®** (pyrantel pamoate) **ORAL SUSPENSION**

**Actions.** Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against: *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuro-muscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

**Indications.** For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

**Warnings.** *Usage in Pregnancy:* Reproductive studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

**Precautions:** Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

**Adverse Reactions.** The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.  
**Dosage and Administration.** *Children:* Antiminth Oral Suspension (50 mg pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 kg of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purgation is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juice.

**How Supplied.** Antiminth Oral Suspension is available as a pleasant tasting orange-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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ORAL SUSPENSION



a drug of choice in  
pinworm infections

Please see brief summary of prescribing information on facing page

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## The evidence of experience

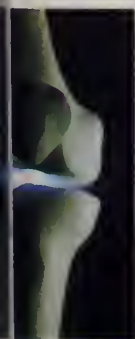
Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis\* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions. However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

\*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).





# Motrin<sup>400</sup>mg TABLETS

ibuprofen, Upjohn

The confidence that comes from experience—  
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

**Upjohn**

The Upjohn Company, Kalamazoo, Michigan 49001

The confidence that comes from experience—  
one more reason to prescribe

# Motrin<sup>400</sup> TABLETS

ibuprofen, Upjohn

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** Aspirin used concomitantly may decrease Motrin blood levels. Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

## Adverse Reactions

### *Incidence greater than 1%*

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea\*, epigastric pain\*, heartburn\*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness\*, headache, nervousness. **Dermatologic:** Rash\* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; \*3% to 9%.

### *Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

### *Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

## How Supplied

### Motrin Tablets, 300 mg (white)

|                |                  |
|----------------|------------------|
| Bottles of 60  | NDC 0009-0733-01 |
| Bottles of 500 | NDC 0009-0733-02 |

### Motrin Tablets, 400 mg (orange)

|                            |                  |
|----------------------------|------------------|
| Bottles of 60              | NDC 0009-0750-01 |
| Bottles of 500             | NDC 0009-0750-02 |
| Unit-dose package of 100   | NDC 0009-0750-06 |
| Unit of Use bottles of 120 | NDC 0009-0750-26 |

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NIM-3

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## EDITORIAL

### Denial Is A Malignancy

**T**HERE seems always to be something in our lives about which we can do nothing, things we deplore but seem forever with us. Bureaucrats, sin, poverty, chiropractors, to name a few, but there is one problem which doctors can do something about and that is our problem with the impaired physician. We will never defeat it completely but, as a problem, it waits there, begging for our best collective efforts.

We all know the basics of the problem. Reports appear with increasing frequency in the medical and popular press, a stream of uncomfortable facts. Physicians kill themselves more often than most. Physicians have a high rate of substance abuse, being perhaps 60 times as likely to develop dependency on narcotics as is the general population. Physicians have a substantial rate of abuse of other stupefying drugs and a large number of these go on to frank alcoholism. The most conservative estimate of alcohol abuse among physicians is that 6% of us are so affected. Some would say 10%.

Tragic as this is from the personal standpoint, it is, because of our peculiar relationship with the public, a special problem to us all collectively. Probably everyone who reads this article will know of at least one physician who needs help. In some cases the one who reads it will be the one who needs the help. Doctor, are you, yourself, actually one of those in special need? Are you denying the problem?

One of the most somber things about depression is that it tends to create a hopeless attitude which then interferes with acceptance of the treatment which generally can indeed deal effectively with it. Because physicians are embarrassed by the diagnosis of an emotional disorder in themselves they eschew the treatment that could once again give life a glow. Some would quite literally rather die than face psychiatric treatment. In the United States suicide causes more physician deaths than do automobile accidents, plane crashes, drownings and homicide combined.<sup>1</sup>

We all know the power of denial. Far too many still think that their alcohol or drug problem is not real or not known by family, friends and patients. Actually, the sufferer may be the last to know. If there's the slightest nagging doubt about the possibility that you might have a problem then you may well have one now or are at risk.

The Physicians' Health Committee of the Kentucky Medical Association very much needs your help. Let us begin, as members of a powerful professional guild, to come to terms with these problems. If you, yourself, are troubled go to a trusted fellow physician and ask for help. Or, if a physician to your knowledge is showing signs of difficulty approach him directly or call for Mr. Bob Klingsmith—(502) 459-9790—who will then make sure that the problem moves to our committee where it will receive a most therapeutic approach. Acceptance may sometimes be painful, but denial, persistent denial, is a true malignancy.

DAVID L. STEWART, M.D.

#### Reference

1. Ross M: Physician suicide risk. *Southern Med J* 68:699, 1975.

### Drugs for Medicaid Patients

**T**he *Journal* is publishing elsewhere in this issue a report from the Formulary Subcommittee of the Kentucky Medical Assistance Program. This report has been mailed to all physicians in Kentucky, but when Doctor Robert McLeod, Chairman of the Subcommittee requested its publication we felt that it had sufficient merit to call it to your special attention. This Committee demonstrates one type of activity in which members of the Association are frequently involved without being noticed by their fellow members. The KMA offers nominations for the Advisory Council and for the Formulary Subcommittee. The Governor and the Chairman of

the Advisory Council, respectively, make the appointments. We think that it is fitting for physicians with such appointments to communicate with their fellow physicians.

The Subcommittee explains the mechanisms by which it hopes to expand the therapeutic armamentarium of physicians without undue increased costs. The members have used scientific consultation, reasonable substitution and exceptional problem management in their attack. It is reas-

suring to see the amount of effort they have applied to this problem.

*The Journal*, further, is happy to publish reports with direct benefits for patients. We believe that physicians working together can accomplish much that individual physicians find difficult. We thank Doctor McLeod for his contribution and applaud him and the members of the Subcommittee.

THOMAS L. HEAVERN, M.D.

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## Formulary Subcommittee Report of Kentucky Medical Assistance Program

Robert N. McLeod, M.D.

Somerset, Kentucky

SINCE there are so many complaints about the drug formulary of the Title XIX or Kentucky Medical Assistance Program drug list, I would like to clarify three points for physicians: 1) who comprises this Committee, 2) the basis on which drugs are added to or removed from the list, and 3) an easier way for you to use the Pre-Authorization Program which is included to help Title XIX recipients receive drugs that are not on the formulary drug list.

First, the Chairman of the Committee is also a member of the Advisory Committee, which technically controls the title XIX Program. The Chairman must be a physician and there are two other physicians on the Subcommittee (one pediatrician, one internist, and one family practice physician at present). Also, there are two practicing pharmacists, a consumer member who is always health oriented (presently a nurse), and a pharmacologist representing each of the two medical schools.

Annually, approximately \$13 million is spent on drugs for Title XIX recipients. For the first time in eight years, additional funds were budgeted for new drugs by the last legislature. In the past, it had been necessary for the Committee to take

certain drugs off the formulary list in order to add new ones. That's why so many physicians' requests have been turned down. This Committee meets at least quarterly. The meetings average at least seven or eight hours. The Committee considers requests from physicians, pharmaceutical companies, and representatives of recipients concerning addition of drugs to the list. The Committee takes the 50 most common diagnoses that are seen yearly in outpatients as compiled by the computer and tries to be certain that all of these are covered by adequate drugs. We give considerable deliberation to each drug, remembering that economy is of prime importance. Experience in most other states has shown that the Program cannot handle the expense of an open formulary and we have tried to stick with the budgeted funds.

Two typical dilemmas will illustrate why controversial decisions were made. First, there have been many requests for a penicillinase-resistant type of anti-staphylococcal drug. However, consultations with infectious disease experts at both the University of Louisville and the University of Kentucky Medical Schools verify the experience of the Committee that, although most outpatients'

staphylococci are penicillin resistant, practically none is erythromycin resistant. Therefore, there is no real need for a routine penicillinase-resistant penicillin to treat staphylococci. If there is legitimate special need for one, such as in outpatient treatment of the patient following hospitalization with osteomyelitis, this can be readily obtained by the pre-Authorization Program which will be considered later.

Another case in point is the drug cimetidine (Tagamet) which is ideal in that it prevents hospitalization and yet, it's so expensive that its unmonitored use by the physician would probably bankrupt the formulary program. For this reason, we have felt that its use should be limited to pre-authorization and this will be done without difficulty if the directions that are given to you below are followed.

Requests for drugs to be added to the Program are welcomed and should be directed to Jean Thomas, Formulary Subcommittee, Department for Human Resources Building, Third Floor, Division for Medical Assistance, 275 East Main Street, Frankfort, Kentucky 40601.

During the past year, there have been approximately 5000 calls for pre-authorization of drugs not on the drug list. Of these, 3900 were approved. This amounted to 16,000 prescriptions. Many people are not aware of how to use this pre-authorization service or how simple it really is. These drugs should primarily be used in an effort to keep patients on an out-patient basis so that they do not have to be hospitalized. The drugs should be used in accordance with commonly accepted professional standards. They are to be used only when other less expensive and equally effective alternatives have been explored.

#### Instructions for Pre-Authorization

If you will put these instructions in a convenient place for your secretary, you get her to do 80% of the work and all you as a physician have to do is to tell what the diagnosis and prognosis is and why you want the patient on this medication. Be certain that the patient's chart is before you, then:

1. Call 1-800-372-2986, a toll-free number.
2. Tell the person who answers the phone the reason for your call. She will ask your patient's name, age, sex, county, and medical card number. It is imperative that she have this number. She will then ask the physician for the diagnosis, prognosis, and if there is any other medication that the patient is on.
3. You will then be asked the name of the drug requested, strength, dosage, the number of days for which you want it, the manufacturer, and the quantity.
4. Finally, you will be asked for the physician's name, address, state license number, and the name of the pharmacy to which the patient is going to have the prescription filled.

Remember, if your secretary is trained to do this and has these instructions in front of her, she can provide most of the information necessary for pre-authorization. The information you have to give should not take more than one-half minute of your time. This Program has functioned very well for those who have learned how to use it and is the answer to most of the problems that have caused the frequent complaints concerning the Title XIX Drug Program. Thank you for this opportunity to explain how this Program functions.

---

Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.



## Handy tear-out page of current officers of Kentucky specialty groups: 1978-1979

**Kentucky Society of Allergy and Clinical Immunology**—President: John M. Karibo, M.D., 2120 Newburg Rd., Louisville 40205

**Kentucky Society of Anesthesiologists**—President: L. Jack Scott, M.D., 1801 Ashley Cir., Bowling Green 42101

**Kentucky Chapter, American College of Chest Physicians**—President: Laman A. Gray, Jr., M.D., Dept. of Surgery, Health Sciences Center, Louisville 40232; Secretary-Treasurer: David H. Bizot, M.D., 404 Baptist East Doctors Bldg., Louisville 40207

**Kentucky Dermatological Society**—President: William F. Farrell, M.D., 2816 Veach Road, Owensboro 42301

**Kentucky Chapter, American College of Emergency Physicians**—President: Raymond Cohen, M.D., 2238 Millvale Rd., Louisville 40205.

**Kentucky ENT Society**—President: Archibald F. Shuler, M.D., Trover Clinic, Madisonville 42431

**Kentucky Chapter, American Academy of Family Physicians**—President: Charles B. Spalding, M.D., 201 S. 5th St., Bardstown 40004

**Kentucky Neurosurgical Society**—President: Peter Jones, M.D., 1221 S. Broadway, Lexington 40503

**Kentucky OB-GYN Society**—President: William H. Keller, M.D., #4 Physicians Park, Frankfort 40601

**Kentucky Occupational Medical Association**—President: James E. Keehan, M.D., Brown & Williamson Tobacco Corp., 1600 W. Hill St., Louisville 40232

**Kentucky Orthopaedic Society**—President: Thomas D. Brower, M.D., UK Medical Center, Lexington 40506

**Kentucky Society of Pathologists**—President: Louis D. Dubilier, M.D., 2370 Nicholasville Road, Lexington 40503

**Kentucky Chapter, American Academy of Pediatrics**—President: Joan E. Rider, M.D., 1701 Alexandria Dr., Lexington 40504

**Kentucky Chapter, American College of Physicians**—Governor: Walter S. Coe, M.D., 207 Baptist East Drs. Bldg., Louisville 40207

**Kentucky Society for Plastic and Reconstructive Surgery**—President: Morton L. Kasdan, M.D., Suburban Medical Plaza, Suite 7-F, Louisville 40207

**Kentucky Psychiatric Association**—President: C. William Briscoe, M.D., Doctors Park, Corbin 40701

**Kentucky Association of Public Health Physicians**—President: Philip G. Weiler, Jr., M.D., 330 Waller Ave., Lexington 40504

**Kentucky Chapter, American College of Radiology**—President: C. D. LeNeave, M.D., Community Hospital, Mayfield 42066

**Kentucky Chapter, American College of Surgeons**—President: William Jernigan, M.D., Trover Clinic, Madisonville 42431

**Kentucky Urological Association**—President: Albert Joslin, M.D., 1001 Center St., Owensboro 42301

**Kentucky Academy of Eye Physicians & Surgeons**—President: Gerald Berman, M.D., 314 Medical Towers Bldg., Louisville 40202





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Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

**\* Warning**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K<sup>+</sup> frequently; both can cause K<sup>+</sup> retention and elevated serum K<sup>+</sup>. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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**When painful spasm  
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## (dicyclomine hydrochloride USP)

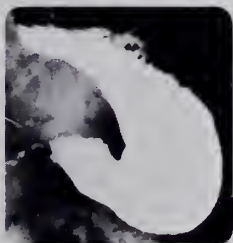
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In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

... Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



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*"The correlation of spasm relief and drug given was excellent."*

\*This drug has been classified "probably" effective in treating certain functional G.I. disorders.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

#### Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

# Merrell

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AVAILABLE ONLY ON PRESCRIPTION.

Brief Summary  
INDICATIONS

For use as adjunctive therapy in the treatment of peptic ulcer. IT SHOULD BE NOTED AT THIS POINT IN TIME THAT THERE IS A LACK OF CONCURRENCE AS TO THE VALUE OF ANTICHLINERGICS/ANTISPASMODICS IN THE TREATMENT OF GASTRIC ULCER. IT HAS NOT BEEN SHOWN CONCLUSIVELY WHETHER ANTICHLINERGIC/ANTISPASMODIC DRUGS AID IN THE HEALING OF A PEPTIC ULCER, DECREASE THE RATE OF RECURRENCES, OR PREVENT COMPLICATION.

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

May also be useful in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, acute enterocolitis, and functional gastrointestinal disorders); and in neurogenic bowel disturbances (including the splenic flexure syndrome and neurogenic colon).

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy), obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis), paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis, toxic megacolon complicating ulcerative colitis, myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: autonomic neuropathy; hepatic or renal disease; ulcerative colitis—Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon; hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension; hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia, increased ocular tension; loss of taste; headache, nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage:** Bentyl 10 mg capsule and syrup: Adults: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. Children: 1 capsule or teaspoonful syrup three or four times daily. Infants: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg: Adults: 1 tablet three or four times daily. Bentyl Injection: Adults: 2 ml (20 mg) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>®</sup> (bethanechol chloride USP) should be used.

Product Information as of October, 1976

The 24th Annual Spring Clinical Conference, presented by the Lexington Clinic, Lexington, Kentucky will be held April 5, 1979. The Conference topic is "Specialty Problems in Primary Care." Guest lecturer is Charles F. Wooley, M.D., Professor of Medicine, Division of Cardiology, Ohio State University. For further information, contact Phillip Martin, Lexington Clinic, 1221 South Broadway, Lexington, Kentucky 40504, or call (606) 255-6841.

**KMA**  
**Annual Meeting**  
**September 24-27**  
**1979**  
**Ramada Inn**  
**Bluegrass Convention**  
**Center**  
**Louisville, Kentucky**

**Merrell**

MERRELL NATIONAL LABORATORIES





## ASSOCIATIONAL NEWS



### Dr. Carter Receives AMA Award



Tim Lee Carter, M.D. (center), recipient of the Dr. Benjamin Rush Award with his wife, Mrs. Kathleen Carter and Tom E. Nesbitt, M.D., President of AMA. (Photo by Joe Fletcher, courtesy of AMA.)

Kentucky's 5th U. S. Congressional District Congressman, Tim Lee Carter, M.D., was the 1978 recipient of the AMA's prestigious Benjamin Rush Award at the recent AMA Interim Meeting in Chicago. The award was presented during the opening session of the House of Delegates on December 3 by AMA President Tom E. Nesbitt, M.D., a long-time friend of Doctor Carter's.

The Rush award is given each year to a U. S. physician who has made an outstanding contribution to the community in citizenship and public service. It is given in commemoration of Doctor Benjamin Rush, a physician signer of the Declaration of Independence who was an early leader of America. The award, for which KMA nominated Doctor Carter, recognized him for his service

as a key Congressman on vital health issues, as well as his practice of medicine in his hometown of Tompkinsville, Kentucky.

Doctor Carter has been one of the strongest supporters in Congress of free enterprise and the American medical system. He has been most receptive to the views of organized medicine and played a focal role in crucial recent issues, including hospital cost containment and certificate of need.

In accepting the award, Doctor Carter expressed his thanks, acknowledging his kinship with organized medicine and his many physician friends nationally and in his home town. Mrs. Kathleen Carter stood with her husband as he received the award.

# Accept no substitute for your professional judgment

As a physician, you have the right to prescribe the drug which you believe will most benefit your patients. Now, substitution laws make it more difficult to exercise that right. In many states, unless you specifically direct pharmacists to dispense your brand-name prescription as written, they may be required by law to substitute another drug for your brand-name prescription.

This means that the ultimate drug selection is no longer yours; its source is left to the pharmacist's discretion. You will have forfeited your right to prescribe as you see fit. Preserve your rights. Specify that you will accept no substitution.

## **When you accept no substitutes...**

- You ensure that your patient receives exactly that product you have specified on your prescription
- You choose the quality of the product dispensed to your patient
- You can exercise the right to select a product based upon its proven therapeutic performance and to select manufacturer that stands behind its brand name or generic product
- You can support the kinds of research programs that are vital to drug discovery and development
- You can help sustain important physician, pharmacist and patient education services supported by innovative, research-oriented firms

For complete information on the drug substitution law effective in your state, please consult your local Pfizer Representative.





## Trustees' Report

### SIXTH TRUSTEE DISTRICT

**Earl P. Oliver, M.D., Scottsville**

The year 1978 was one of some growth in the medical community of the Sixth District and 1979 shows promise of even greater progress in the larger cities, and to some extent, in the smaller ones.



Warren County continues to grow both in population and medical facilities. The new City-County Hospital is now in a progressive stage of construction, and promises to offer more advanced medical

care both in the general medical field and medical specialties when it is completed. A renal dialysis center has also recently located in Bowling Green. In addition, a large new mall is under construction in Bowling Green and several Louisville and Nashville shops will be located there.

Barren County reports two new physicians are expected to locate in Glasgow next summer.

Allen County reports the possibility of two additional physicians coming to the area within the next six to nine months. In addition, a Rural Health Initiative Program with the services of a midwife has been funded for Allen County, but is not as yet in operation. This will be a pilot project and undoubtedly much of the funds will be expended for administrative salaries and expense; however, the benefits received by the citizens of Allen County is yet to be determined.

Your Trustee wishes a happy and prosperous New Year to each physician in the Sixth District, and also urges each member to support the KMA by buying at least \$1000 stock in our new Kentucky Medical Insurance Company.

### FIFTEENTH TRUSTEE DISTRICT

**Donald C. Barton, M.D., Corbin**

It is with pleasure that I undertake the responsibility of serving as your Trustee for the next three years.

I thank you for this opportunity and pledge to work diligently in your behalf.



There are many problems and issues facing medicine as we start this year. If we all work together as a team, I am sure we can solve these obstacles in a way that will benefit our profession.

Today, I would like to discuss something that is dear to all of our hearts, Medicare and Medicaid. In area II as of July 1, 1978, the Raw Prevailing Fee for a routine office visit for a specialist is \$12.00, according to Medicare. The adjusted Prevailing Fee is \$10.00. This figure is arrived at by multiplying an economic index

(142.6%) and the raw prevailing fee of the base year (1971). This means that if your Usual and Customary Fee in 1977 was \$12.00, then you should be reimbursed by Medicare at \$10.00 per routine office visit. In area III, these same figures are \$10.00 and \$8.60 using the same formula as above. If this is not true in your practice, then you should contact the Medicare office and find out why not.

These fees are not what are being paid by Medicaid, however. It will be this spring before the updating is done by Medicaid using these Medicare figures. The last profile updating done by Medicaid was in May, 1978, utilizing 1977 Medicare profiles which were based on the calendar year 1976. So you can see that Medicaid takes about two years in reflecting any fee increase and they don't seem to make much effort in shortening this lag period.

## In Memoriam

### HARRY J. BATTS, M.D.

**Lexington**

**1923-1978**

Harry J. Batts, M.D., Lexington, formerly of Louisville, died on December 6, 1978. Doctor Batts, a radiologist, was a 1954 graduate of the University of Louisville School of Medicine. He was a member of the American Medical Association and the Kentucky Medical Association.

### JOHN D. TRAWICK, JR., M.D.

**Louisville**

**1911-1978**

John D. Trawick, Jr., M.D., 67, died on November 2 in Louisville. A psychiatrist, Doctor Trawick had been an associate professor of psychiatry at the University of Louisville School of Medicine for 25 years. He was past staff president of Our Lady of Peace Hospital, past president of the Southern Psychiatric Association, founder and first historian-archivist of the American College of Psychiatrists and a member of the Kentucky Medical Association. Doctor Trawick was a 1936 graduate of the University of Louisville School of Medicine.

### J. FARRA VAN METER, M.D.

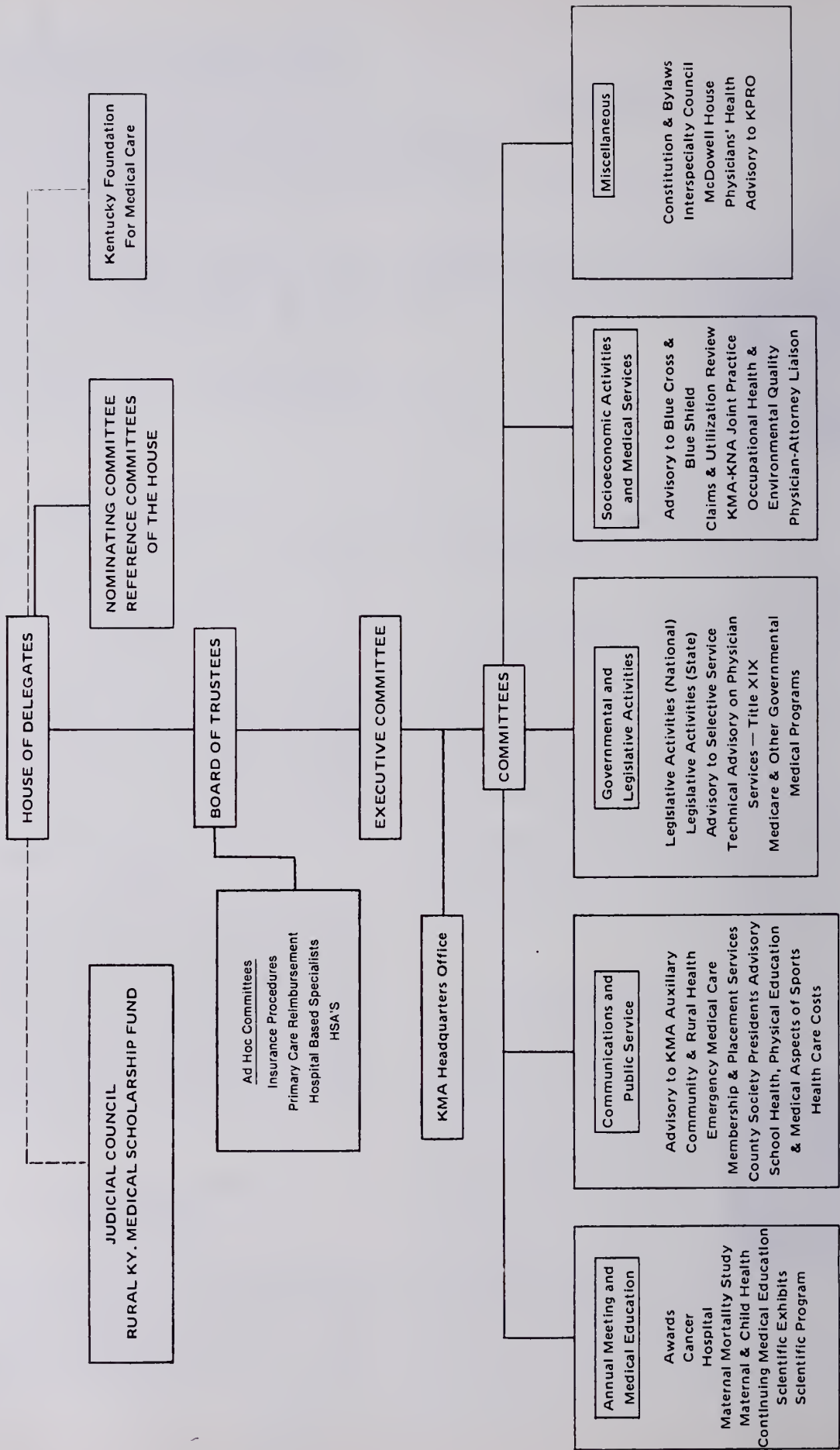
**Lexington**

**1899-1978**

J. Farra Van Meter died in Lexington on December 5, 1978, at the age of 79. Doctor Van Meter, a surgeon, was graduated in 1925 from the University of South Carolina School of Medicine. He was a Past President of the Fayette County Medical Society and in 1974, received the Distinguished Service Award from the Kentucky Medical Association.



KMA Organization Chart — Revised November 1978



Formed By Physicians  
To Serve Physicians

# Kentucky Medical Insurance Company

KMIC was formed by the Kentucky Medical Association following endorsement by its House of Delegates of a physician-owned Kentucky medical professional liability insurance company. Shares of KMIC stock are being made available to Kentucky physicians through an Offering Circular distributed by officers and staff of the company. KMIC is currently raising funds for capitalization and expects to be fully operational soon.

**KMIC** An opportunity for Kentucky physicians to ensure a continuing, stable source of reasonably priced professional liability insurance.

**KMIC** An opportunity for Kentucky physicians to participate as a policyholder and shareholder in a stock insurance company.

For a copy of KMIC's Offering Circular, contact:



**Don Chasteen**  
Sales Manager



**Riley Lassiter**  
Executive Vice President



**Shirley Roessler**  
Office Manager

## **Kentucky Medical Insurance Company**

3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205  
Telephone (502) 459-3400



## Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

### DECEMBER

- 1-2 AAMSE Editors' Conference, Chicago
- 3-7 AMA Interim Meeting, Chicago
- 7 Peer Review, Louisville
- 12-14 FLEX Exams, Louisville
- 14-15 Board of Trustees, Louisville
- 22-25 Office Closed

### January

- 3 Emergency Medical Care, Louisville
- 9 *Journal* Editors, Louisville
- 10 Judicial Council, Louisville
- 11 Paramedic Advisory, Louisville
- 18 Interspecialty Council, Louisville
- 25 Community and Rural Health, Louisville
- 30 EVP Advisory, Chicago



## Did you know . . .

**William H. Merritt** was recently named executive director of Kentucky Medical Services Foundation, Inc. (KMSF), and **Richard P. Henderson** was named the associate director. KMSF is the external, non-profit corporation which receives and disburses the professional fee income generated by faculty members for the patient care services in the University of Kentucky Albert B. Chandler Medical Center.

**James K. Hackett** was named assistant to the dean and director of finance for the University of Kentucky Albert B. Chandler Medical Center College of Medicine.

### COST CUT CORNER

**JANUARY**—Duplicative testing increases cost without improving care.

When referring patients to another physician, send along all reports (lab tests, x-rays, etc.) which may be needed, in order to avoid cost by duplication. Conversely, try to obtain previous reports and lab results when a patient is referred to you.

Know the cost of diagnostic tests and x-rays you order and resist *patient* pressure to prescribe tests, treatments or medication which you feel are harmless but unnecessary.

**Tenuate®**  
(diethylpropion hydrochloride NF)

**Tenuate Dospan®**  
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

#### Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma, agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychological dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdose. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE:** Manifestations of acute overdose include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdose.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.  
Cayey, Puerto Rico DD633

Direct Medical Inquiries to:

MERRELL-NATIONAL LABORATORIES  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215, U.S.A.

Licensors of Merrell®

**References:** 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., D'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

# Merrell

8-3921 (Y587A)



**Whether overweight is a  
complicating factor...  
or just uncomplicated overweight.**

# **Tenuate<sup>®</sup> Dospan<sup>®</sup> <sup>IV</sup>** **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

## **A useful short-term adjunct in an indicated weight loss program.**

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

## **In uncomplicated obesity.**

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

## **Clinical effectiveness.**

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.<sup>1</sup> And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."<sup>2</sup> Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.  
And it's responsible medicine.**

# **Merrell**



For prescribing information see opposite page

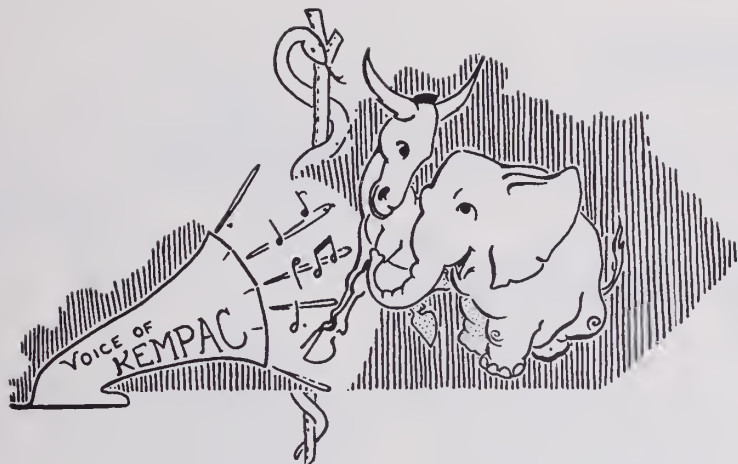


# EMPIRIN<sup>®</sup> COMPOUND c CODEINE

Each tablet contains aspirin, 325 mg; phenacetin, 160 mg; and caffeine, 32 mg, plus a certain amount of codeine in one of the following strengths: \*4—4 mg per tablet; \*3—8 mg per tablet; \*2—15 mg per tablet; and \*1—30 mg per tablet. (Warning—may be habit forming.)



Parke-Davis Laboratories, Inc.  
Research Triangle Park,  
North Carolina 27709



### WHAT IS KEMPAC?

The Kentucky Educational Medical Political Action Committee (KEMPAC) is a voluntary, non-profit group whose membership consists of physicians, their spouses, members of their immediate families and medical personnel. KEMPAC was founded in January, 1962, and exists to give the Kentucky physician an effective means of political action.

### IS KEMPAC AFFILIATED WITH EITHER MAJOR POLITICAL PARTY?

NO! It is not bound by party labels. KEMPAC's record is one of support for the candidate whose platform and philosophy, not party, have the greatest support by the medical community.

### HOW ARE KEMPAC/AMPAC CONTRIBUTIONS SPENT?

KEMPAC/AMPAC dues are used ONLY for candidate support. All operational expenses, educational programs, etc. are paid for with corporate or educational funds. While KEMPAC contributes to candidates running for both state and national offices, AMPAC concerns itself with candidates running for the U.S. House and Senate. No candidates for executive offices in either State or National races are supported by KEMPAC or AMPAC.

### WHO DIRECTS KEMPAC'S ACTIVITIES?

KEMPAC's Board of Directors is bipartisan and is composed of 18 members, all appointed annually by the KMA Board of Trustees. There are 14 physicians, two from each congressional district, one from each major party. There are four members of the Auxiliary whose party affiliation is evenly divided from each major party. The major parties are the two parties that polled the greatest number of votes in the preceding presidential election. Of course, currently Democrat and Republican.

### HOW DOES KEMPAC DECIDE WHICH CANDIDATES TO SUPPORT?

Candidate support must be initiated on the local level with physicians forming a local candidate support committee. Then a request for additional funds is made to KEMPAC. Whether KEMPAC contributes to the candidate's physician support committee depends upon many considerations. Stated briefly, support for candidates is based on realistic political appraisals.

A member must have confidence in the chosen and elected Board of Directors and allow them, as a small and compact well-informed group, to make decisions based upon all the facts which, in the end, are the wisest decisions in the interest of all doctors.

KEMPAC encourages a member to give its political opinions both vocal and in writing to the KEMPAC Board or the director in the respective area.

### CANDIDATE SUPPORT

Since 1962 both KEMPAC and AMPAC have participated in Kentucky primary and general elections of U.S. Congressional candidates. Since 1967 KEMPAC has participated in both the primary and general elections of candidates for the Kentucky General Assembly.

### WHY JOIN KEMPAC AND AMPAC?

Bipartisan political action is a necessary political reality. KEMPAC and AMPAC provide the vehicles through which the profession as a group can become involved in a united effort to elect candidates who will give medicine's position a fair hearing. KEMPAC is interested in the free practice of medicine and is opposed to governmental intervention.

It is true that part of the member's contributions may be spent to help elect a candidate from a political party to which you do not belong, but it is also true that a part of your money will be spent for candidates who are members of your own party.

A candidate running for office in California can be just as important to the practice of medicine in Kentucky as a candidate within our own State. In Washington, a congressman's vote is counted as a vote regardless of his home state. This is why AMPAC is so important to the big picture of politics.

Being concerned enough about the free enterprise system and having a voice in promoting and improving government is why you should join your colleagues as an effective political action group.

*Copies of KEMPAC and AMPAC reports are filed with the Federal Election Commission and are available for purchase from the Federal Election Commission, Washington, D.C. If your practice is incorporated, KEMPAC and AMPAC voluntary political contributions should be written on a PERSONAL CHECK. Contributions are not limited to the suggested amount. Neither the AMA nor the KMA will favor or disadvantage anyone based upon the amounts or failure to make PAC contributions. Contributions are subject to the limitations of FEC Regulations, Section 110.1 110.2 and 110.5. (Federal regulations require this notice).*



## BOOK REVIEWS

### Atlas of Surgery in the First Six Months of Life

S. Frank Redo, M.D., Harper & Row, Inc., 188 pages.  
Copyright 1978.

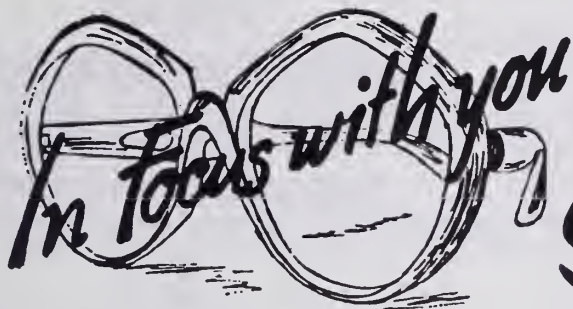
An atlas of surgery is the author's exposition of methods which he prefers to use. The author makes no statistical verification that his approach is better than another; he only says, "This works for me. I like to do it this way." In this book Frank Redo shows how he performs 26 groups of common pediatric surgical operations choosing deliberately to leave out more complex operations for biliary atresia, Hirschsprung's disease, and the whole area of cancer in childhood. He goes beyond mere surgical description with comments concerning preoperative and postoperative care of the patient, and states that this atlas is a comparison to his book *Principles of Surgery in the First Six Months of Life* (Harper & Row Inc., 1976).

The layout of the book makes it easy to refer from the written comment to the illustrations. The illustrations by Mr. Peter Ng are as realistic as black and white drawings can be, and illustrate the operative points which Dr. Redo wishes to make.

Some of Dr. Redo's preferences are somewhat out of line with the pediatric surgeon's usual ap-

proach to operative correction. For example, Dr. Redo does not do an appendectomy following the correction of malrotation of the colon (Ladd's procedure), nor does he perform an appendectomy following reduction of intussusception. The advocacy of a transpleural approach for the correction of tracheo-esophageal fistula is in contrast to the general use of the extrapleural operative technique which most pediatric surgeons now use. The illustration of tracheostomy using a metal tube is rarely followed now. These variances from more general trends in operative management do not detract from the usefulness of this book. As Dr. Redo states in his preface, the book "is designed for surgeons at all levels of training and experience and for nurses, students, residents and pediatricians who, by knowing what is done at surgery, are better able to manage patients postoperatively and can discuss, orient and advise parents more adequately regarding the contemplated surgery."

DILLER B. GROFF, M.D.  
Department of Surgery  
University of Louisville  
School of Medicine



# Southern Optical

|               |  |                        |          |
|---------------|--|------------------------|----------|
| LOUISVILLE    | Southern Optical Bldg.                       | 640 River City Mall    | 583-0687 |
|               | Medical Towers Bldg.                         | Floyd & Gray           | 582-1119 |
|               | Doctors Office Bldg.                         | Liberty at Floyd       | 583-7909 |
|               | Medical Arts Bldg.                           | 1169 Eastern Parkway   | 452-2332 |
|               | Highland Professional Plaza                  | 810 Barret Ave.        | 584-7934 |
| ST. MATTHEWS  | Professional Bldg. East                      | 3101 Breckinridge Lane | 459-0133 |
|               | Medix Bldg.—Adj. S.S. Mary & Elizabeth Hosp. | 224 E. Broadway        | 367-2277 |
|               | Broadway Bldg.                               |                        | 583-7137 |
|               | 313 Wallace Avenue                           |                        | 895-9155 |
|               | 108 McArthur Drive                           |                        | 895-3855 |
| NEW ALBANY    | 901 Dupont Road at Breckinridge Lane         |                        | 897-3264 |
|               | Professional Arts Bldg.                      | 1919 State Street      | 945-2802 |
| BOWLING GREEN | Greentree Shopping Ctr.                      | 900 Fairview Ave.      | 843-6556 |
| OWENSBORO     | Doctors Bldg.                                | 1001 Center Street     | 684-1508 |
|               | Lincoln Professional Ctr.                    | 2816 Veach Road        | 685-4725 |
| GLASGOW       | Happy Valley Center                          | 409 Happy Valley Rd.   | 651-5113 |

#### HEARING AIDS

Louisville 638 River City Mall • 901 Dupont Rd.  
 New Albany Professional Arts Bldg. • 1919 State St.  
 Bowling Green 900 Fairview Avenue  
 Owensboro Lincoln Professional Ctr. • 2816 Veach Rd.

#### CONTACT LENSES

Louisville 640 River City Mall • 108 McArthur Dr.  
 Bowling Green 3101 Breckinridge Lane  
 Owensboro 900 Fairview Avenue  
 Doctors Bldg. • 1001 Center St.

BankAmericard and Master Charge Welcomed

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**PROFESSIONAL LIABILITY INSURANCE**  
*is a high mark of distinction*

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**MEDICAL PROTECTIVE COMPANY**  
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Male Breast Carcinoma—Srinivasan and Greiver  
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**If you don't know  
Cancer's  
Warning Signals,  
how do you know  
you haven't got one?**

- 1.
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- 5.
- 6.
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1. Change in bowel or bladder habits.
2. A sore that does not heal.
3. Unusual bleeding or discharge.
4. Thickening or lump in breast or elsewhere.
5. Indigestion or difficulty in swallowing.
6. Obvious change in wart or mole.
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in your  
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ROCHE

# For recurrent attacks of urinary tract infection in women

# Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

## Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

Before prescribing, please consult complete product information, a summary of which follows:

**Indications and Usage:** For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis.** To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (Federal Register, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

**Urinary Tract Infections:** Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older

| Weight |     | Dose—every 12 hours |                          |
|--------|-----|---------------------|--------------------------|
| lbs    | kgs | Teaspoonfuls        | Tablets                  |
| 20     | 9   | 1 teasp. (5 ml)     | ½ tablet                 |
| 40     | 18  | 2 teasp. (10 ml)    | 1 tablet                 |
| 60     | 27  | 3 teasp. (15 ml)    | 1½ tablets               |
| 80     | 36  | 4 teasp. (20 ml)    | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30                      | Usual standard regimen     |
| 15-30                         | ½ the usual regimen        |
| Below 15                      | Use not recommended        |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



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## Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

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February 1979  
Volume 77  
Number 2

In this issue: Uses of Radiotherapy in Treatment  
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MDS

# The Journal Of The Kentucky Medical Association



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## LIBRIUM® chlordiazepoxide HCl/Roche THE ANXIETY-SPECIFIC

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malforma-

tions as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation; increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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# MESSAGE FROM THE PRESIDENT

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**O**N January 4, 5 and 6, Mr. Carl Wedekind and I attended a regional AMA meeting on state health legislation in Fort Lauderdale, Florida.

The topics ranged from state legislation relating to medical education, certificate of need, comprehensive health insurance and malpractice legislation, to hospital and medical cost containment.

We were fortunate to have Governor Julian Carroll as the luncheon speaker on Friday, June 5, and his address was well-received. We heard many compliments on his talk and most were amazed at the excellent relationship between the Medical Association and the Governor in Kentucky. Governor Carroll is the current chairman of the powerful National Governors' Conference which, in recent years, has been extensively involved in national health legislation.

From the list of subjects discussed, and proposed legislation in the field of medical and health legislation, we may expect a very busy 96th Congress and a busy 1980 Kentucky State Legislature. Now is the time for those of us who are concerned with health and medical care for the people of Kentucky to begin our ground work for constructive programs to be supported in 1980.

Your State Legislative Committee Chairman has, and soon will do so again, addressed the Inter-specialty Council, so that all facets of medicine may bring to the Legislative Committee their proposals for legislation which may be important in their individual specialty. Also, at the present time, the special called session of the Kentucky General Assembly is convened and the business at hand is being monitored closely for health implications.

Judging from the discussions at the conference in Florida, the national health insurance proposals of Senator Kennedy and Labor will again try for more support and passage—even in the face of the great deficit spending required. Other proposals, including President Carter's phase-in N.H.I. program, will be in the forefront. As you are aware, the AMA House of Delegates voted not to have the N.H.I. bill, formulated by the AMA Council on Legislation, ready for introduction to Congress. I think it is likely that the AMA Council on Legislation will "go back to the drawing board" for a new proposal based upon specific areas designated by the House of Delegates.

Cost Containment continues as the most immediate problem and all of us must concentrate our efforts in this direction. We have the opportunity to prove voluntarily that medical and hospital costs may be held in line. It seems obvious that HEW is hoping that we will not succeed so that a mandatory cap may be applied.

I have skipped about in this presentation, but I believe all points are pertinent and deserve our consideration.

CARL COOPER, JR., M.D.  
KMA President



# POSTGRADUATE OPPORTUNITIES



## IN KENTUCKY

### FEBRUARY, 1979

- 23-24 Symposium on Psychopharmacology\*, Health Sciences Center, University of Louisville School of Medicine.
- 28 Kentucky Academy of Family Practice Seminar, Quality Inn Riverview, Covington, Ky. Contact KAFP, (502) 458-2244.

### MARCH, 1979

- 5-9 Practical Microsurgery Symposium and Workshop\*\*
- 8 Bluegrass Radiological Society Lecture\*\*\*, "Pediatric Radiology." Armand E. Brodeur, M.D., Cardinal Glennon Memorial Hospital, St. Louis, Mo. (Lecture in Lexington.)
- 9 C. Dwight Townes Memorial Seminar\*\*
- 9-11 Advanced Cardiac Life Support\*\*
- 12-13 Neonatal Transport\*  
Hyatt Regency, Lexington
- 23-24 Rheumatology Symposium\*  
Hyatt Regency, Lexington
- 29 Common Skin Disorders\*\*

### APRIL, 1979

- 2-3 Medical Aspects of Sports\*  
Hyatt Regency, Lexington
- 5 24th Annual Spring Clinic Conference, Lexington Clinic, Lexington, Kentucky. Contact Phillip Martin, Lexington Clinic, 1221 South Broadway, Lexington, Kentucky 40504, or call (606) 255-6841.
- 20-21 Endocrinology for the Practicing Physician\*  
Hyatt Regency, Lexington
- 23-26 Surgical Anatomy\*\*
- 25-27 Advances in the Therapeutics of Internal Medicine (American College of Physicians)\*, Hyatt Regency, Lexington
- 26-28 High Risk Pregnancy\*\*
- 26-30 Modern Management of Major Problems in Surgery\*\*

### MAY, 1979

- 6-11 Hand Surgery, Marriott Inn. For information call (502) 588-6185.
- 10-12 KAFP Annual Scientific Meeting, Ramada Inn, Hurstbourne Lane, Louisville.
- 23 Problems of Sepsis, University of Louisville Health Sciences Center. For information call (502) 588-6185.

### OCTOBER, 1979

- 20 Kentucky Regional Meeting, American College of Physicians, Hyatt House, Louisville.

### NOVEMBER, 1979

- 11-16 1st Annual Family Medicine Update, Hyatt House, Louisville. For information call (502) 588-6185.

\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

\*\*For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

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This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K<sup>+</sup> frequently; both can cause K<sup>+</sup> retention and elevated serum K<sup>+</sup>. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. Dyazide® interferes with fluorescent measurement of quinidine.

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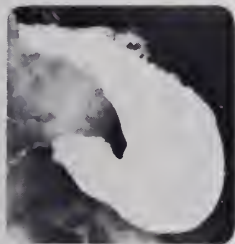
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†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

#### Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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It should be noted that the use of anticholinergic/antispasmodic drugs in the treatment of gastric ulcer may produce a delay in gastric emptying time and may complicate such therapy (antral stasis). Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

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## A Clinical Approach to the Choice of Antimicrobial Agents, Case Number 2. Cellulitis

Subramanian Srinivasan, M.D., Julio C. Melo, M.D., and Martin J. Raff, M.D.

Louisville, Kentucky

This is the second in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choices of antimicrobial agents and explanations of why the authors choose one as the best agent.

### Case Number 2. Cellulitis

A 61-year-old non-insulin-dependant diabetic, white female presented to the Emergency Room with a one-week history of pain, swelling and tenderness over the right foot. She recalled minor trauma to her right foot one week previously. On physical examination her temperature was 103°F, pulse 110/min, respirations 26/min, and blood pressure 160/90 mm Hg. Examination of the right foot revealed marked soft tissue swelling over the dorsum, with erythema and tenderness. There were lymphangitic erythematous streaks seen on the right lower extremity and tender popliteal and inguinal adenopathy was present. The hemoglobin was 13.8 gm/dl, hematocrit 45%, WBC count 18,700/mm<sup>3</sup> with 80% neutrophils, 10% bands, and 10% lymphocytes. Urinalysis showed +2 glucose without acetone, cells, casts or bacteria. Blood sugar was 620 gm/dl and serum acetone

was negative. The most appropriate choice of management at this time would be to infiltrate the area of cellulitis with sterile saline (non-bacteriostatic) and gram stain and culture the aspirate and begin therapy with

- A. tetracycline 250 mg orally 4 times daily for 7 days
- B. phenoxymethyl penicillin (Pen V<sup>R</sup>, V-Cilin<sup>R</sup>) 250 mg orally 4 times daily for 7 days
- C. clindamycin (Cleocin<sup>R</sup>) 125 mg orally 4 times daily for 7 days
- D. Indanyl sodium carbenicillin (Geocillin<sup>R</sup>) 382 mg orally 4 times daily for 7 days
- E. Hospitalize the patient, obtain blood cultures and begin oxacillin (Prostaphlin<sup>R</sup>) intravenously 1 gm every 4 hours

Answer: E, Oxacillin or another antistaphylococcal penicillin.

This patient should probably be hospitalized because of the diabetes and her systemic reaction to the infection. After obtaining appropriate cultures, antibiotic therapy should be initiated parenterally. Diabetic patients are prone to soft tissue infections and therefore hospitalization may be necessary because of serious clinical illness and altered requirements for control of hyperglycemia during the initial stages of therapy for the infection.

Although cellulitis is most often caused by Group A beta-hemolytic streptococci (*S. pyogenes*), staphylococci can produce an indistinguishable clinical picture. Tetracycline should not be the initial choice of antibiotic because most strains of *Staphylococcus aureus* are resistant to tetracycline derivatives. Occasionally, minocycline (Minocin<sup>R</sup>, Vectrin<sup>R</sup>) may be effective against

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staphylococci which are resistant to other tetracyclines.<sup>1</sup> In addition, however, the catabolic action of tetracyclines may be deleterious, particularly in the diabetic patient.<sup>2</sup>

Phenoxy-methyl penicillin (Pen V<sup>R</sup>, V-Cillin<sup>R</sup>) or penicillin G are no longer reliable drugs with which to initiate therapy in suspected or proven staphylococcal infections because of the high rate of resistance in strains acquired either in the community or the hospital.<sup>3</sup>

Clindamycin (Cleocin<sup>R</sup>), although it has anti-staphylococcal activity, should not be chosen as the initial drug in view of the cost and the potential for serious side effects such as antibiotic-associated pseudomembranous colitis.<sup>4</sup> That complication may not obviate its use in other more serious staphylococcal infections when deemed necessary.

Carbenicillin indanyl sodium (Geocillin<sup>R</sup>) is rapidly cleared by the kidneys, reaching very high concentrations in the urine, and is therefore effective in treating urinary tract infections. Unfortunately, it fails to produce serum or tissue levels adequate for the treatment of systemic infections. In addition, it is meant for use primarily against gram-negative pathogens which are resistant to other antibiotics and should not be used against most gram-positive organisms as the other orally administered penicillins are just as effective and a good deal less expensive. Most strains of staphylococci will be as resistant to this drug as to penicillin G.<sup>5</sup>

Initial antibiotic therapy should therefore be oxacillin (Prostaphlin<sup>R</sup>), one of the other isoxazolyl penicillins (cloxacillin, dicloxacillin, flucloxacillin), nafcillin (Unipen<sup>R</sup>) or methicillin (Staphcillin<sup>R</sup>), all of which have activity against penicillinase-producing strains of *Staphylococcus aureus* as well as against *Streptococcus pyogenes*. Until results of cultures and sensitivity are known, therapy should be continued with this agent.

In this case, streptococci were subsequently isolated in pure culture from the aspirate of the lesion and antibiotic therapy was then changed to aqueous penicillin G. After experiencing an initial clinical response the patient can have therapy continued orally with penicillin G or V and be discharged from hospital.

If prior to beginning treatment, the patient tells you that she previously developed an urticarial or other cutaneous eruption following an oral dose of penicillin, you would then give

- A. oxacillin (Prostaphlin<sup>R</sup>)
- B. cephalexin (Keflex<sup>R</sup>)
- C. erythromycin
- D. tetracycline
- E. chloramphenicol

Answer: C or B

Oxacillin is a penicillin derivative, and as such, the patient will also be allergic to it if she reacts to other penicillins. Tetracycline, although safe in the penicillin-allergic patient, should not be used for the reasons already discussed above. Chloramphenicol, although not producing cross-hypersensitivity reactions in patients allergic to penicillin and being effective against most strains of *S. aureus* and *S. pyogenes*, has too much potential toxicity to warrant its use under these clinical conditions.<sup>5</sup> Cephalexin or one of the other orally administered cephalosporins would be a second choice, since a small number of patients allergic to penicillin may show cross-hypersensitivity reactions with cephalosporins.<sup>5</sup> Cephalosporins should only be used with great caution in patients who have experienced urticarial eruptions or other forms of immediate hypersensitivity reactions to penicillins, because of the possibility of life-threatening cross-hypersensitivity (anaphylaxis).

Therefore, erythromycin would probably be the best choice under these circumstances. However, if the patient were sufficiently ill to warrant parenteral antibiotics, an intravenous cephalosporin might be a better selection as erythromycin given intravenously induces severe thrombophlebitis.<sup>2</sup> Clindamycin would be a reasonable choice as there is less risk of toxic effects from clindamycin than those due to cross-hypersensitivity reactions from cephalosporins, assuming the patient had a history of prior immediate allergic reactions to penicillins.

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# Uses of Radiotherapy in Treatment of Breast Cancer

Justine Yoneda, M.D., Yosh Maruyama, M.D., Charles W. Coffey, II, Ph.D.,  
and Vincent P. Chuang, M.D.

Lexington, Kentucky

The management of breast cancer is changing rapidly. Surgery is becoming less radical and more conservative, and radiotherapy is assuming both a primary as well as a postoperative and a palliative role. Post-mastectomy radiotherapy is now being more effectively delivered because of the advantages offered by electron beam therapy. One of the extremely important roles of radiation is for palliating localized symptoms in the patient with advanced disease. "Spot" radiotherapy is of tremendous value to improve patient comfort with painful metastases in bone, brain, spine, eye, skin, soft tissues, lymph nodes, or elsewhere.

**R**ADIOTHERAPY plays two roles in the management of patients with breast cancer.

First, it can be used for the definitive and curative therapy of the localized tumor, and second, it can be used for palliation of symptoms from recurrent or metastatic tumors.

## Primary Radiotherapy of Breast Cancer

The first role that radiotherapy plays is in treating patients with localized disease without known metastases.<sup>1</sup> These patients may be treated with surgery alone, radiotherapy alone or with a combination of the two.

In a number of centers, breast cancer has been treated primarily by radiotherapy. It is now clear that local control and survival is the same as for those patients treated with primary

radiotherapy as with the standard radical mastectomy.<sup>2</sup> Thus, less radical surgical procedures, such as modified radical, simple mastectomy and tumorectomy are now advocated as an acceptable procedure to use in the treatment of breast cancer.<sup>3</sup> Tumorectomy with axillary node biopsy is also being evaluated. All these lesser surgical therapies should be followed by radical radiotherapy of the breast and peripheral lymphatics of the breast. Recent experiences with radiation, including interstitial radioactive implant therapy, have shown local control rates comparable with surgery, including the more radical surgical procedures. Since there is no one superior method for treating all patients with localized disease, the treatment chosen should be based on the pathology of the lesion and the extent of the disease.<sup>1,2,4</sup> The psychosocial impact that various treatments may have on the patient should also be taken into account.<sup>4</sup>

The advantages to the limited surgery followed by radiotherapy are: (1) cosmetic advantage, (2) emotional advantage, and (3) reduction of some of the side effects associated with more radical procedure; i.e., lymphedema of arm and limitation of arm movement.

The disadvantages of this form of treatment are: (1) in lesions which are fairly large much of the breast tissue has to be removed; therefore, one loses the cosmetic and emotional advantages of this form of therapy; (2) the pathological status of the lymph nodes cannot be determined; these have prognostic and therapeutic value, and (3) there are complications associated with radiotherapy.

The technique used for irradiating breast tissue can be complicated and should be performed by a certified radiotherapist skilled in this procedure. Some of the complications which can be seen include fibrosis and ulceration of the chest which may necessitate the eventual removal of the breast, and radiation injury to normal tissue; i.e., radiation induced pneumonitis, pericarditis

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and brachial plexus injury. The risk for developing any of these complications, however, is relatively small when given by radiotherapists skilled in this technique.

### Post-Mastectomy Radiotherapy of Chest Wall

The patient with localized breast cancer most commonly seen in the Radiotherapy Department is the patient who has already undergone a modified radical or radical mastectomy and is in a category for developing localized recurrence.<sup>5</sup> Generally, these are patients who had large tumors, inner quadrant tumors or patients with positive axillary lymph nodes (especially those patients with many positive nodes or with positive nodes located in the high axilla). Postmenopausal patients do not respond to adjuvant chemotherapy as well as premenopausal women and they are candidates for postmastectomy radiotherapy.<sup>7,8</sup>

The relative risks for recurrence in patients rises according to size of the tumor, the location of the tumor and the status of the lymph nodes.<sup>5</sup>

The incidence of chest wall recurrence after mastectomy in the first five years is 15%, over ten years the incidence rises to 20% even with the early tumors. The incidence of chest wall recurrence increases with the number of axillary nodes involved and with the size of the tumor. If a large number of axillary nodes are involved the incidence may rise to over 50%, as reported in some series.<sup>1</sup> Patients with large lesions, over 8 cm. in diameter, have a high risk of chest wall recurrence.

The patients who have a high risk of recurrence should receive radiation treatments to the supraclavicular nodes, internal mammary nodes and chest wall. It is rare to develop chest wall recurrence (less than 3%) after an adequate course of radiation therapy has been carried out.<sup>6</sup> Radiotherapy to the axilla is recommended if (1) there has been an inadequate dissection of this area; i.e., few lymph nodes sent for pathological examination; (2) extranodal, skin, or muscle disease is present; (3) lymph nodes are positive in the high axilla; and (4) large fixed lymph nodes present before surgery. Postmenopausal status also favors the use of radiotherapy as prophylactic adjuvant chemotherapy<sup>7,8</sup> does not alter the frequency of local or distant spread.

In summary, this practice has not changed since the advent of adjuvant chemotherapy.<sup>7,8</sup> Fifteen to twenty percent of patients treated with

chemotherapy instead of radiation still will recur on the chest wall or in the peripheral lymphatics of the breast. Local control will require chest wall radiotherapy as has been done in the past. The contention that there is immune suppression by radiotherapy,<sup>9</sup> which was recently popular, is now fading, particularly since the treatment of cancer by immunological methods has proved so ineffective after a decade of intense investigation.<sup>10</sup>

There are various radiotherapeutic techniques used to treat localized breast cancer. Basically, the internal mammary nodes and supraclavicular nodes are treated using anterior ports. If the axilla has not been dissected this area is also included. These areas can be treated with Cobalt-60 irradiation or more recently with electrons. The advantage of using electrons is that the energy is delivered from the surface to a particular depth. Beyond this depth there is minimal dose delivered, so that the deeper lying tissues can be spared; electrons therefore cannot be used for deeply situated tumors. The depth of penetration of the electrons depends on the energy of the electrons.

The chest wall may be treated with electrons or Cobalt-60 irradiation. The Cobalt-60 irradiation is delivered using tangential fields to minimize the dose delivered to the normal tissues (see diagram). It is the treatment of choice in patients with a moderate amount of breast tissue remaining after surgery.

In general to treat microscopic disease 5000 rads over five weeks are necessary for control. If there is gross disease, an additional 1000-2000 rads may be necessary for control.

### Electron Beam Therapy Using Variable Electron Energies

The electron beam modality of radiotherapy is now being widely used for post-operative and primary therapy of breast cancer.<sup>11</sup> Since the beam has a limited depth of penetration, it appears to offer distinct advantages in the treatment of breast cancer with fewer side effects in skin, lung, bone, and esophagus. It is clear that a variety of beam energies facilitates the adjustment of beam depth penetration (Figure 1) to the requirements of the individual patient. Current research has defined methods to simulate beams and optimize electron beam therapy.<sup>12</sup>

It is possible to treat the internal mammary lymph nodes, the chest wall, the axilla and the





Figure 1. Variable Energy Electron Beams and Depth Penetration: Films show the depth of electron beam penetration of the 6, 12, and 18 MeV electron beam. Energy is selected to the depth of treatment required.

peripheral lymphatics of the breast in the supraclavicular region. The chest wall is treated with an electron beam of energy between 3-12 MeV, dependent on whether the pectoral muscles are present or were removed, and on whether the anterior or lateral chest wall is treated (Figure 2). The supraclavicular lymph node region is treated with Cobalt-60, Linac X-rays, or 12-18 MeV electron beam.

It is also useful for recurrences on the chest wall for the same reasons. Recurrences are treated with fields directed to the chest wall and if irradiation has not been done previously to the peripheral lymphatic regions as well. Doses of 6000-6500 rads/6-6.5 weeks are adequate for tumor control. In either situation, CAT scanning of the thorax (Figure 3) has greatly facilitated treatment planning by providing a contour of the chest wall, giving a measurement of chest wall thickness at different sites and localizing the tumor and its dimensions and extensions more accurately. The following case report describes electron beam therapy of the chest wall.

#### Report of a Case

M.B. is a 47-year-old white female who had bilateral mastectomies for carcinoma of the breast. The left mastectomy was done in 1968 and the right mastectomy was done in 1975. In 1970, she had a bilateral oophorectomy. She had some response with endocrine therapy including DES. She had extensive tumor nodules, ulcerations, masses, and infiltrated thickened red skin, recurrent over the entire chest wall, of both sides of the upper abdomen and chest from the umbilicus regions up to the sternum and laterally to the posterior axillary lines bilaterally. These developed over a period from 1976-1977. She had a hypophy-

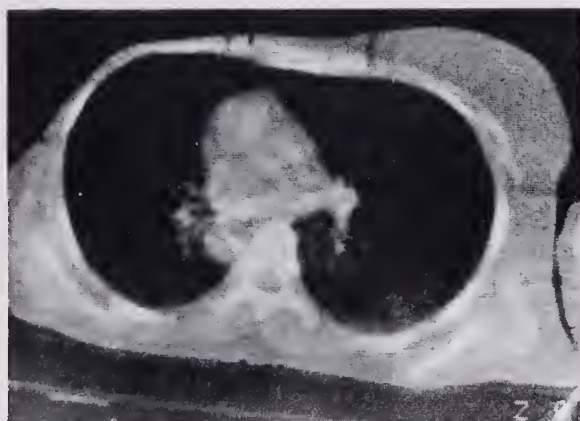


Figure 2. Computerized Axial Tomogram (CAT) scan of thorax at mastectomy level. Note absence of left breast on left side of figure.

sectomy in 1976 without response. She then was referred for radiotherapy to the chest wall using the electron beam.

The entire left chest wall and most of the right anterior and the left post-lateral chest was treated. A 6-9 MeV electron beam was used. She was treated between September 15, 1976 to October 12, 1976 and received 20 treatments, to a dose of 3,500 rads (80% isodose), in a period of one month. Treatments were well tolerated, but at that point she had marked skin reaction and therefore the treatments were stopped for a period of three weeks. Following that, therapy was resumed on November 10th, and between November 10th and November 23rd, she received additional treatments to a total of 5,250 rads. The above represents a dose at the 80% isodose located approximately 2 cm below the surface of the skin. The peak given dose

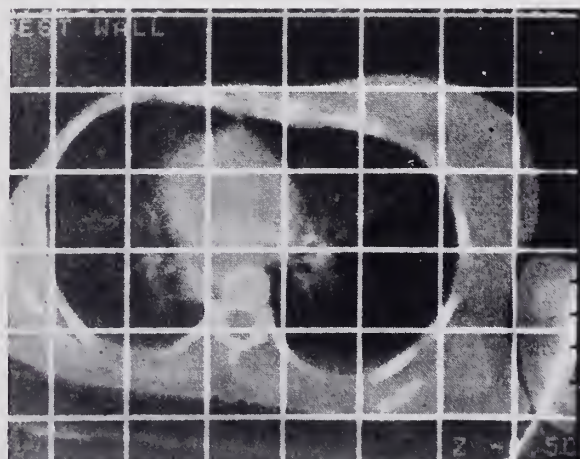


Figure 3. CAT scan with superimposed grid to plan chest wall radiotherapy. Each grid is 5 x 5 cm in size, and thus the exact thickness of the chest wall and its different portions can be determined for electron beam therapy. Three fields and three beam energies (internal mammary, chest wall, and axilla) were used to treat this patient.

to the chest wall was approximately 6,500 to 7,000 electron rads. Subsequently, she had electron beam treatments to the right lateral chest wall, right lateral abdomen and right lower abdominal skin.

All treatments were well tolerated and led to marked skin reaction with erythema. She had excellent regression and all lesions of the chest wall healed and were free of tumor masses and ulceration. All the ulcerated regions have healed and the tumor nodulation cleared.

The patient is now completely healed and has remained so for two years. She is active, plays golf and is doing well without chemotherapy.

#### CAT Scanning for Planning Electron Beam Therapy

Figure 3 shows a computerized axial tomogram obtained of the thoracic region for treatment planning. The position of normal structures (lung, spinal cord, heart) are readily localized as well as the tumor bearing skin region. The chest wall contour, tumor site and normal organs as well as the thickness of the tissues (e.g., skin, chest wall) are easily measured and electron beam therapy planned accordingly. CAT scanning has greatly facilitated precision and individualized radiation therapy (Figure 4).

#### Radiotherapy for Palliation

The second role of radiotherapy in patients with metastatic disease is a palliative role.<sup>13</sup> It is used together with hormonal or chemotherapy to relieve symptoms.

Unfortunately, a significant number of patients with localized disease will eventually develop metastases in spite of therapy. It is probable that these patients already had micrometastases at the time of diagnosis. Therefore, radiotherapy or surgery in these patients serves to control the localized disease only and adds little to the overall survival of these patients. A number of patients, however, just have localized disease at the time of diagnosis. These are the patients that are potentially curable with surgery or radiotherapy.

The patient seen most often in the Radiotherapy Department is the patient with osseous metastases. Radiotherapy performs three functions: (1) it relieves pain and approximately 80% to 90% of those treated have significant relief of pain after therapy; (2) it is used to prevent pathological fractures which is especially important in the weight bearing bones and



Figure 4. Film showing chest wall dose distribution of electron beam therapy. Study was done in a phantom and shows the uniformity of dose over the entire curved chest wall surface.

spine; and (3) in those patients with lytic lesions or pathological fractures it can be used to heal and strengthen the bone. Approximately 33% of these patients will show recalcification after therapy.

#### Brain and Spine

Radiotherapy can also be used to relieve neurological symptoms in patients with brain metastases or spinal cord compression.

#### Bleeding, Ulceration, Local Masses

Radiotherapy may be used to relieve pain, bleeding or ulceration of masses in patients with advanced localized disease.

#### Nodes and Skin

Nodes and skin metastases respond promptly to local radiation treatment.

#### Eye and Orbit

Radiation can also be used to prevent blindness in patients with orbital, retinal or choroid metastases.

#### Radiation Castration

In patients who may respond to hormonal manipulation radiotherapy can be used as a means of castration. It is easy to give, requires relatively low dosages and can be given on an out-patient basis. Although comparable results are obtained, its effects are delayed. It is, therefore, usually reserved for patients who are not good surgical candidates.

As in all cancers, the excellence of therapy for breast cancer depends to a large extent on the



close cooperation between physicians. The referring physician, surgeon, medical oncologist and radiation oncologist need to work together in the care of the patient. Although treatment guidelines can be defined in a general way, therapy must still be individualized to achieve the best results for each patient. In recent years, the importance of estrogen<sup>14</sup> receptors (ER) has been recognised and the role of radiotherapy has gradually been redefined. Suffice it to state, the postmenopausal patient and those with negative ER (or failure of estrogen binding) assays have become a category of patients in which radiotherapy has assumed an important role. Post-operative therapy, as well as primary and palliative therapy are again of importance, especially as the recent interest in the immunosuppressive effects or radiotherapy has faded.<sup>10</sup>

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# Endobronchial Lipoma: Report of a Case

Sibu P. Saha, M.D., and Porter Mayo, M.D.

Lexington, Kentucky

This report presents a case of endobronchial lipoma, an extremely rare benign mesodermal tumor of the tracheobronchial tree. Such tumors rank third in incidence among benign mesodermal tumors of the lung and bronchi.<sup>1-3</sup> Although histologically benign, endobronchial lipoma may cause death from airway obstruction or secondary complications, such as atelectasis, bronchiectasis, pneumonitis and suppuration.<sup>4</sup>

## Report of a Case

A 73-year-old man was hospitalized because of non-productive cough and wheezing of about three months' duration. Physical findings were unremarkable with the exception of decreased breath sounds over the left lower lobe associated with a few scattered rhonchi. Routine laboratory procedures were within normal limits. Chest x-ray showed partial atelectasis of the left lower lobe (Figure 1). Bronchoscopic examination detected a smooth, glistening mass protruding into the left main stem bronchus. The biopsy of this mass was reported as chronic inflammation. Bronchogram showed almost complete obstruction of the left main stem bronchus with only partial filling of the left lower lobe (Figure 2). The patient underwent transpleural bronchotomy. A 3 cm x 1 cm x 1 cm pedunculated tumor was excised. Histologic examination confirmed our impression of a benign lipoma. The patient has been followed over six years without evidence of recurrence.

## Discussion

Watts et al<sup>5</sup> have shown that adipose tissue is normally present in the wall of the bronchi 1 mm or larger in diameter. It is from these cells that lipomata arise. Endobronchial lipomas are often pedunculated, occasionally sessile and very rarely with peribronchial extension. Patients reported<sup>2</sup>



Figure 1. Chest x-ray showing partial atelectasis of the left lower lobe.



Figure 2. Bronchogram showing almost complete occlusion of the left main stem bronchus with only partial filling of the left lower lobe.

are predominately men in the 40- to 60-year-age group. Symptoms and signs are largely dependent upon the location of the tumor and the degree of bronchial obstruction.

The most commonly described symptoms are cough, wheezing and chest pain. The radiologic findings may be normal but atelectasis, pneumonitis or abscess may occur depending on the size and the location of the tumor. Endobronchial lipomas occur most often in the major bronchi and are readily visible through the fiberoptic bronchoscope. Such tumors can usually be demonstrated

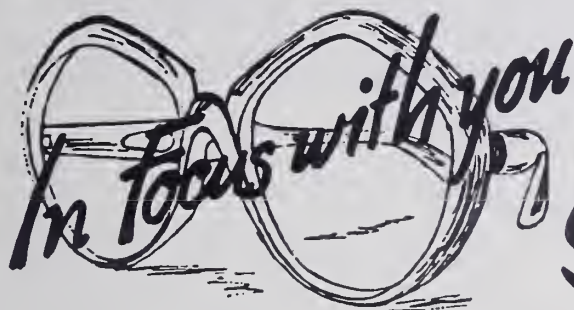
by this study before being manifest in plain roentgograms. Bronchography helps to assess the bronchial tree distal to the obstruction, and biopsy often establishes a histologic diagnosis. The treatment of this tumor has varied from endoscopic excision to extirpation by bronchotomy, lobectomy and pneumonectomy. Total excision by transpleural bronchotomy is recommended. Pulmonary resection, such as lobectomy and pneumonectomy, should be carried out only when there is definite evidence of bronchiectasis or irreversible pulmonary damage. All patients with persistent or recurrent cough should undergo bronchoscopic examination. The prognosis is good following complete removal of this tumor.

#### Acknowledgment

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## Recent Developments in Allergy

### Part 1—Asthma

There are major advances in the understanding and treatment of asthma in the last few years. The focus is on identifying subtypes of asthma and on treating with new drugs as well as refined techniques with older drugs.

The diagnosis of asthma now appears to be no more specific than that of "arthritis." While extrinsic (allergic) asthma still is a recognized category, intrinsic asthma is now fractionated to include infectious asthma, exercise-induced asthma (EIA), and aspirin sensitive asthma, among others.

EIA, more common in children, is characterized by initial bronchodilatation for two to four minutes followed by bronchoconstriction at five to ten minutes of sustained exercise. The bronchospasm appears to climax at three to five minutes postexercise and subsides by 20 minutes. All exercise is not equal in provoking EIA. Running is worst, with cycling, swimming, and walking being progressively less aggravating. The reason for this is not clear. Medical management centers about sympathomimetic aerosols, Theophyllin, and cromolyn (EIA is an FDA non-approved use of cromolyn). Steroids and Vanceril specifically do **not** work. Cromolyn can be taken 15 minutes prior to exercise and is usually very effective. Of course, any asthmatic who is already wheezing can be made worse by exercise and that is not classified as EIA. Remember that sympathomimetic aerosols are banned in international athletic competition.

Aspirin sensitivity, as defined by decrease in FEV<sub>1</sub> on challenge, occurs in 8% to 14% of

adult asthmatics. In childhood atopic asthmatics, though, a recent study (PED 56:443) showed 28 percent had fall in FEV<sub>1</sub> on ASA challenge. The bottom line is that aspirin is best avoided by all asthmatics. It should be stressed that challenge is **not** a safe procedure. Salicylamide and sodium salicylate are safe in aspirin-sensitive asthmatics. On the other hand, FD & C yellow #5, Indocin, Motrin, etc., may cross-react.

The newest treatment form in asthma is Vanceril or beclomethasone aerosol. It is a non-absorbed steroid for use by inhalation. There is no suppression of pituitary-adrenal axis. The drug is primarily for use in steroid dependent asthmatics and is for continuous use, not p.r.n. Some patients unexplainably do not respond. Disadvantages include low incidence of oral candidiasis (treated with concomitant Nystatin) and unmasking of eczema or rhinitis when oral steroids are tapered. Remember that oral steroids must be tapered cautiously. Also, like cromolyn, Vanceril is a prophylactic medicine and is worthless in the treatment of an asthma attack.

Theophyllin, an old drug in asthma management, now has the capabilities of allowing direct blood measurements. Once this tool was developed, it became clear that people metabolize theophyllin at remarkably variable rates. Thus, the idea of a standard dose was thrown out and each patient is studied individually when necessary. To maintain an ideal blood level of 10-20 micrograms per decaliter, the dose can literally vary from 4-40 milligrams per kilogram per day, with children generally requiring higher doses. While most asthmatics do not need theophyllin blood level studies, refractory chronic asthmatics on round-the-clock theophyllin and some hospital patients should be checked. If there is a question of theophyllin toxicity, such as arrhythmia or seizure, blood levels can be very important. Remember that not all asthma preparations contain pure theophyllin. For example, aminophyllin is only 80% theophyllin and Quadrinal, containing theophyllin calcium salicylate, is only 50% theophyllin.

*Editor's Note: The CME Committee is revitalizing the CME section of the Journal with periodic reports from specialty societies about new and innovative concepts being used within the specialties. The articles also will include the clinical application recommended with described procedures. CME articles will be informative, yet short and concise.*

## Part 2—RAST; Stinging Insect Allergy

The Radioallergosorbent test (RAST) measures antigen-specific serum IgE in a test tube using a radioimmunoassay. Using this simple but expensive test it is possible to determine allergic or IgE type sensitivity to different antigens. RAST is a test which gives about the same information as allergy skin testing, and is now available in many commercial laboratories. Some advantages of the RAST are: (1) it can quantitate IgE type sensitivity to given allergens; (2) it avoids the risk of systemic allergic reactions to skin tests which can occur when individuals are extremely sensitive to certain antigens such as drugs, insects, or foods; and (3) it can be used to determine sensitivity when it is difficult to skin test patients because of severe skin disease.

The RAST also has some disadvantages when compared to skin testing: (1) it is very expensive in that the cost per antigen tested is approximately \$10, which makes it about five times more expensive than skin testing, and (2) results are not usually available for several days while skin test results are available immediately.

The RAST is a very nice tool for research and certain clinical situations, but most investigators do not believe it will replace the skin tests for standard allergy surveys.

An important development has occurred in the diagnosis and treatment of hymenoptera (bee,

wasp, yellow jacket, hornet) sensitivity. Currently, the only form of treatment for patients with anaphylactic sensitivity is immunotherapy with an extract made from the whole body of the insect. These extracts contain little actual venom and are, therefore, sometimes inaccurate when used for skin testing or ineffective when used for treatment. Recent studies have clearly shown that the venom of the insects is a much better antigen for both diagnostic and treatment use. A number of patients have been reported who were treatment failures with whole body extract and were then successfully treated with venom. The treatment of choice is, without doubt, venom immunotherapy. It has not yet been FDA-approved for general use, but release is anticipated, at least for honeybee venom, within the next two years.

The RAST test is proving very useful in diagnostic testing for hymenoptera venom allergy (IgE sensitivity). Venom RAST testing is now available in some commercial reference laboratories. RAST has proven particularly useful in this situation because of occasional severe, systemic reactions when skin testing with whole body extract. The opposite situation also occurs in which whole body extract skin tests are negative and the RAST test for venom is clearly positive.

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# GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

## Surgical Procedures in the Hemophiliac

Hemophilia A, or Factor VIII deficiency, represents the most common hereditary bleeding disorder in man. There are over 800 hemophiliacs in the Commonwealth of Kentucky. These patients may experience any of the surgical diseases that affect the population at large as well as special problems which may perplex the orthopedic surgeon. Unique problems attend any operative procedure performed on such a patient. However, with skilled management of replacement of specific factor deficiencies, these patients may safely undergo elective operation. Two hemophilic patients who recently underwent operation illustrate some of the principles of management in these individuals.

### Case Reports

**Case 1.** A 43-year-old male hemophiliac was hospitalized because of a long history of right upper quadrant pain. He had a history of hemophilia since birth (Figure 1). Multiple problems related to his bleeding disorder included multiple hemarthroses of both upper and lower extremities. Additionally, he had had an intracranial hemorrhage and multiple episodes of upper gastrointestinal bleeding. Laboratory studies during numerous prior hospitalizations disclosed an elevated calcium and depressed phosphate level. Six weeks prior to the present admission he had undergone a neck exploration, and a parathyroid adenoma weighing 800 mg was removed. During that hospitalization, the Factor VIII deficiency was managed successfully with antihemophilic factor.

While recovering from his neck exploration, he had an exacerbation of right upper quadrant pain with nausea

and vomiting. An oral cholecystogram failed to visualize the gallbladder. Ultrasonic examination demonstrated an echo pattern consistent with gallstones. He was admitted for elective cholecystectomy.

Physical examination showed a well developed, well nourished man in no distress. He had a well healed neck scar from the previous neck exploration. He had limitation of motion of his right elbow and both knees from previous bleeding episodes of the joints. There was minimal right upper quadrant tenderness. The hemoglobin level was 13.2 with a hematocrit of 40%. The prothrombin time was normal and partial thromboplastin time was slightly elevated (47.1 seconds versus a control of 32.1 seconds). Factor VIII level was 53%. During the two-week period prior to hospitalization, the patient was managed on a self-administered home maintenance dosage of antihemophilic factor (AHF) of 1400 units intravenously daily. The patient's hospital course is summarized graphically in Figure 2. We reserved enough antihemophilic factor for one full week of intensive therapy. A regimen of 1400 units of AHF every eight hours was initiated pre-operatively. Immediately prior to operation, the patient received 2800 units of AHF. He received 1780 units intraoperatively. This only raised the Factor VIII level to 60% and postoperatively the dosage was increased to 1400 units every four hours until the Factor VIII level was near 100% activity. This was done because his abdominal sumps, which were left in place following cholecystectomy, drained an excess amount of serosanguineous fluid for several days. However, after attaining normal levels of Factor VIII, they were discontinued without difficulty. The patient did well and was discharged on the ninth postoperative day, at which time his maintenance dose of AHF was 1400 units per day. Following discharge, the dosage of medication was decreased to twice to three times weekly over the next month.

**Case 2.** A 52-year-old man had a six-year history of mild to moderate hemophilia A, not requiring maintenance therapy with AHF. A left-sided inguinal hernia had been present and asymptomatic for five years. However, one year prior to admission, he developed left groin pain. Physical examination was within normal limits except for a left-sided inguinal hernia. His initial Factor VIII level was 10%.

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## FAMILY of T.K.

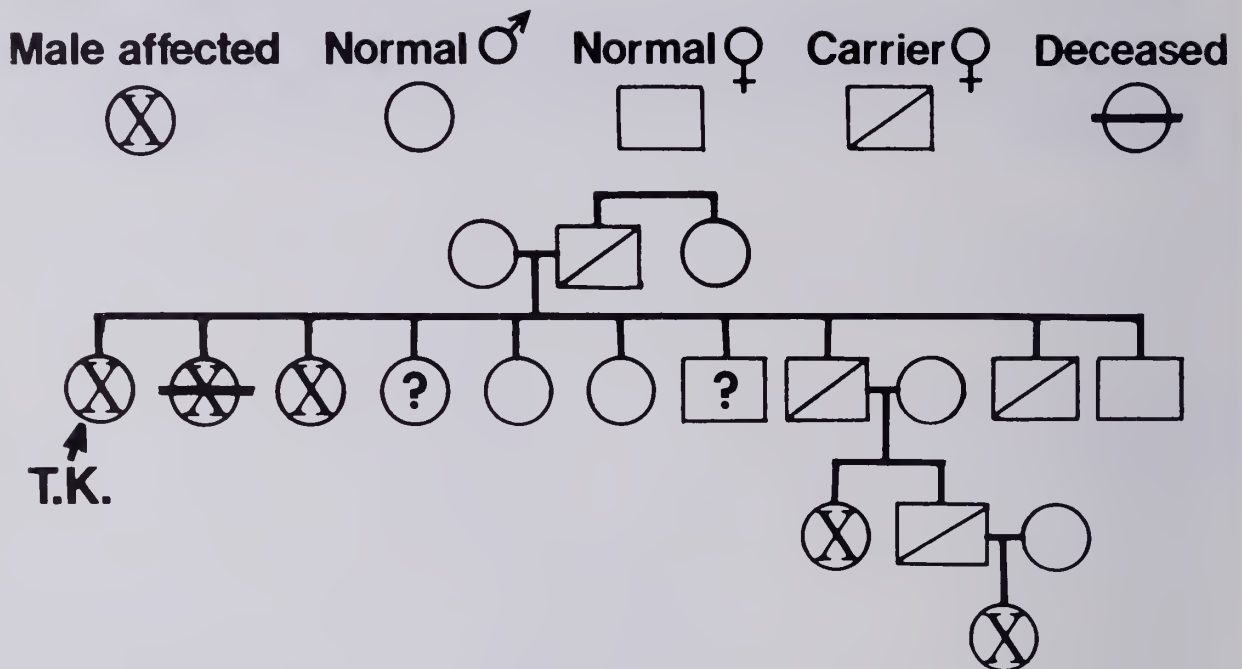


Figure 1. The pedigree showing the number of affected individuals in the family of the first patient.

The patient's hospital course is summarized in Figure 3. He was initially given 1400 units of antihemophilic factor daily. This initially raised the Factor VIII activity to 90% prior to operation. In the immediate perioperative period his Factor VIII activity remained over 60% during the time he was recovering from a left inguinal herniorrhaphy. Clinically he did well for 48 hours but then the Factor VIII level declined to 30%. Concurrently, a scrotal hematoma developed that was not relieved by scrotal support and recurrent aspiration. The AHF dose was increased to 2500 units daily, which brought his Factor VIII activity to 100%. On the eighth hospital day scrotal exploration was undertaken. A large clot was evacuated and a hemovac drain was placed. The drain was removed five days later. All symptoms of scrotal swelling subsided and he was discharged on the nineteenth postoperative day. There has been no recurrence of his hernia and he no longer requires antihemophilic factor.

### Discussion

Hemophilia A or Factor VIII deficiency results from a defective Factor VIII protein that crossreacts immunologically with true Factor VIII. This defective Factor VIII is nonfunctional. Hemophilia A is a sex-linked recessive disease of variable expression which has an incidence reported from 1:10,000 to 1:20,000. The incidence of hemophilia in Kentucky is 1:5,000; the increase is most likely due to the inbreeding of families. Also, an estimated one-third of new hemophiliacs are mutants with no previously affected family members.<sup>1</sup>

The clinical description of hemophilia dates from the second century A.D.<sup>2</sup> In 1820, the genetic transmission was discovered.<sup>3</sup> Addis discovered Factor VIII in 1910.<sup>4</sup> Since that time, the therapy for hemophilia has

advanced from plasma, to animal AHF, to Fraction I;<sup>5,6</sup> cryoprecipitates and plasma concentrates are now being used.<sup>1,7-9</sup> Antihemophilic Factor became readily available in 1954,<sup>6</sup> thus allowing safer operation in the hemophiliac.

Hemophilia is suspected in a patient with an abnormally activated PTT and is confirmed through Factor VIII assays by percent activity. Classifications are: severe, 0 to 2% activity; moderate, 2 to 5% activity; mild, 5 to 25% activity; and sub-hemophilia, 25 to 50% activity. Carrier females have an average Factor VIII activity of 50%, but this may range from 25% to 75%.<sup>1</sup> Thus, under surgical or traumatic stress they may bleed as much as a true hemophiliac since only severe to moderate hemophiliacs bleed significantly.

### Orthopedic Problems in the Hemophiliac

The orthopedic surgeon has several potential roles in the management of musculoskeletal problems in the hemophiliac. Knowledge of replacement therapy and a competent hematology laboratory to measure Factor VIII activity are of paramount importance.

In the treatment of hemarthrosis, which accounts for 85% of all bleeding episodes in the hemophiliac, the clinical picture is that primarily of pain. Aspirin is strictly contraindicated in any form. For severe pain, morphine and/or its derivatives should be administered intravenously or orally—not intramuscularly. There is usually a prodrome in the experienced hemophiliac. The most common sites of the acute hemarthroses are the knee, elbow and ankle. The management of such problems involve the arrest of the hemorrhage, relief of pain, maintenance and restoration of joint function, and prevention of chronic joint changes.



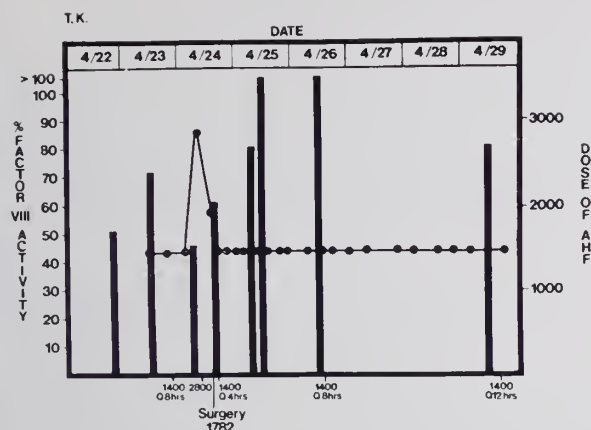


Figure 2. The bar graph indicates the percent of Factor VIII activity while the solid balls indicate the dosage of AHF administered. This patient was admitted with a high Factor VIII activity because of intensive home preparation prior to admission.

Treatment consists of factor replacement to at least 15% to 20% of normal, immobilization and splinting. Minor hemarthrosis can be cared for in the home; however, the patient with severe hemarthrosis should be hospitalized. In cases of acute hemarthrosis, aspiration of the joint, although rarely necessary, is very difficult when the hemarthrosis is older than 24 hours. Prior to joint aspiration AHF must be administered intravenously until an adequate Factor VIII level is obtained.

One of the most important aspects of managing acute hemarthrosis is rehabilitation. This should include isometric exercises when the joint is painful and active exercises when the joint pain is decreased and swelling subsides. The joint must be maintained in a normal position with splints in between the periods of exercise for immobilization and prevention of further bleeding.

In managing chronic hemophilic arthropathy, one has to deal with adhesions and decreased range of motion. Adequate physiotherapy is necessary to maintain good muscle tone. Occasionally, synovectomy is necessary but should be reserved for the joint in which swelling has persisted for several months despite adequate treatment. Reconstructive surgery involves total joint replacement, with continuous suture and adequate splints. No suction drains are used. Obviously, there should be coagulation control and this should be maintained until wound healing is at a 40% level. Good results have been achieved with arthrodesis, osteotomy, and low friction arthroplasties, with no further bleeding and complete relief of pain.

The second most frequent site of spontaneous hemorrhage is muscle. As with acute hemarthrosis, the clinical feature is acute pain. The four basic goals in treating muscle hemorrhage are arresting hemorrhage, relief of pain, early restoration of function, and prevention of damaging sequelae. Treatment consists of immobilization and rehabilitation as previously described.

Contractures and neurological complications are frequently attributable to muscular hemorrhage. Intramuscular hemorrhages cause femoral nerve palsies in the lower extremity and about the elbow. Hemophilic cysts and pseudotumors rarely occur. Treatment consists of surgical intervention only if the lesion is progressing.

Fractures in the hemophilic should be treated with a method of immobilization that requires no pins. Circular casts should be avoided until hemostasis has been achieved. Hemostasis is usually attained by maintaining a Factor VIII level of at least 30% to 40% initially until immobilization is accomplished.

### Treatment of Surgical Problems

There are multiple manifestations of hemophilia A. Spontaneous hemarthroses are unique to hemophilia A and B and may lead to crippling panarthritides and fibrous ankylosis. Subcutaneous or intramuscular hematomas secondary to minor trauma may spread through subcutaneous or fascial planes, leading to large collections that may become infected, compress vital structures or simulate appendicitis or an acute abdomen.

Without treatment, hemorrhage resulting from minor trauma becomes life threatening. Upper gastrointestinal bleeding usually has an organic cause that is treatable. Hematuria may not have an organic cause but is usually resistant to treatment with AHF. Intussusception occurs when an intramural hematoma acts as the lead point. Intracranial bleeding occurs in 2.5% to 7.8% of hemophiliacs, usually in young hemophiliacs as a result of trauma.<sup>1</sup>

Prior to advances in treating the hemophilic, only very emergent operations were performed. Currently, operation is easily tolerated by the hemophilic whose coagulation has been controlled.<sup>5</sup> Prior to 1960, plasma was the only therapeutic modality readily available<sup>6</sup> and still serves as the guidepoint for standardizing doses.<sup>1</sup> One unit of AHF represents the amount of activity present in one unit of human plasma. Now, the two mainstays of therapy are cryoprecipitates and Factor VIII concentrates. Cryoprecipitates are seven to 20 times as pure as plasma and Factor VIII concentrates can be 10 to 400 times as concentrated.<sup>1</sup>

As with all therapeutic modalities, there are drawbacks to treating hemophilia. Complications of therapy include congestive heart failure, hepatitis and hemolysis.<sup>1,7,9</sup> Hepatitis is a function of both the multiple transfusions hemophiliacs require and the large donor pools involved in concentrating antihemophilic factor.

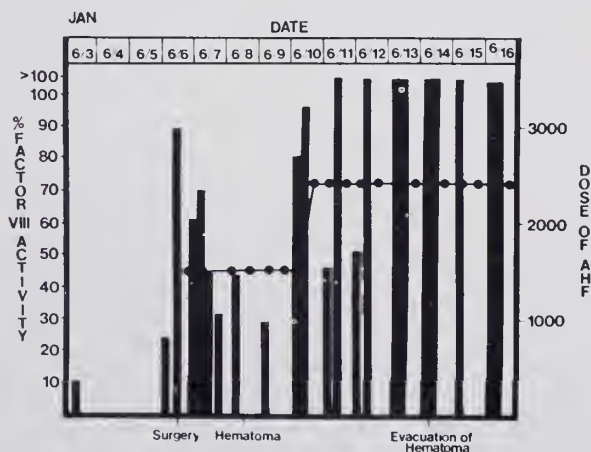


Figure 3. The replacement with 1400 units daily of AHF did not prevent formation of a hematoma when the patient Factor VIII activity dropped to 30%. The restoration of the Factor VIII level to normal by the use of 2500 units daily caused prompt resolution of the operative hematoma.

Gamma globulin can ameliorate but not prevent hepatitis.<sup>6</sup> Hemolysis results from Anti-A and Anti-B antibodies present in donor AHF. This can be prevented by using type specific AHF.<sup>8</sup>

Preoperative preparation of hemophiliacs involves a one-week supply of AHF that is ready prior to operation, and loading doses administered in the immediate preoperative period, with confirmation of therapeutic levels.<sup>8</sup> Therapy should be maintained at greater than 30% to 50% activity for 14 days.<sup>9</sup> As illustrated in the previous cases, it might be wise to modify these figures upward slightly.

Therapy, both operative and nonoperative, becomes possible for the hemophiliac as a result of the discovery of replacement regimens. All operative procedures are now available to the hemophiliac. Because of the new AHF regimens, which may be administered at home, hemophiliacs need not be subjected to physical or emotional stress as a result of incurring injury.

RAYMOND FAIRES, M.D.  
MAYNARD STETTEN, M.D.  
HUGH C. WILLIAMS, M.D.  
J. DAVID RICHARDSON, M.D.

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**Tenuate**®  
(diethylpropion hydrochloride NF)

**Tenuate Dospan**®  
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

### Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSEAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.  
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:

MERRELL-NATIONAL LABORATORIES  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M. A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

**Merrell**

8-3921 (Y587A)



**Whether overweight is a  
complicating factor...  
or just uncomplicated overweight.**

# **Tenuate<sup>®</sup> Dospan<sup>®</sup> <sup>IV</sup>** **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

## **A useful short-term adjunct in an indicated weight loss program.**

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

## **In uncomplicated obesity.**

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

## **Clinical effectiveness.**

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.<sup>1</sup> And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."<sup>2</sup> Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.  
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For prescribing information see opposite page





## The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis\* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

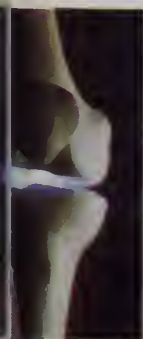
The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions.

However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

\*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair, little or no self-care).





# Motrin<sup>®</sup> 400 mg TABLETS

ibuprofen, Upjohn

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one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

**Upjohn**

The Upjohn Company, Kalamazoo, Michigan 49001

The confidence that comes from experience—  
one more reason to prescribe

# Motrin<sup>®</sup> 400 mg TABLETS

ibuprofen, Upjohn

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** Aspirin used concomitantly may decrease Motrin blood levels. Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

## Adverse Reactions

### Incidence greater than 1%

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea\*, epigastric pain\*, heartburn\*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness\*, headache, nervousness. **Dermatologic:** Rash\* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; \*3% to 9%.

### Incidence less than 1 in 100

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

### Causal relationship unknown

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

## How Supplied

### Motrin Tablets, 300 mg (white)

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Bottles of 500 NDC 0009-0733-02

### Motrin Tablets, 400 mg (orange)

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Unit-dose package of 100 NDC 0009-0750-06  
Unit of Use bottles of 120 NDC 0009-0750-26

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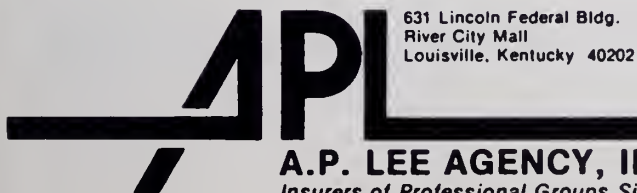
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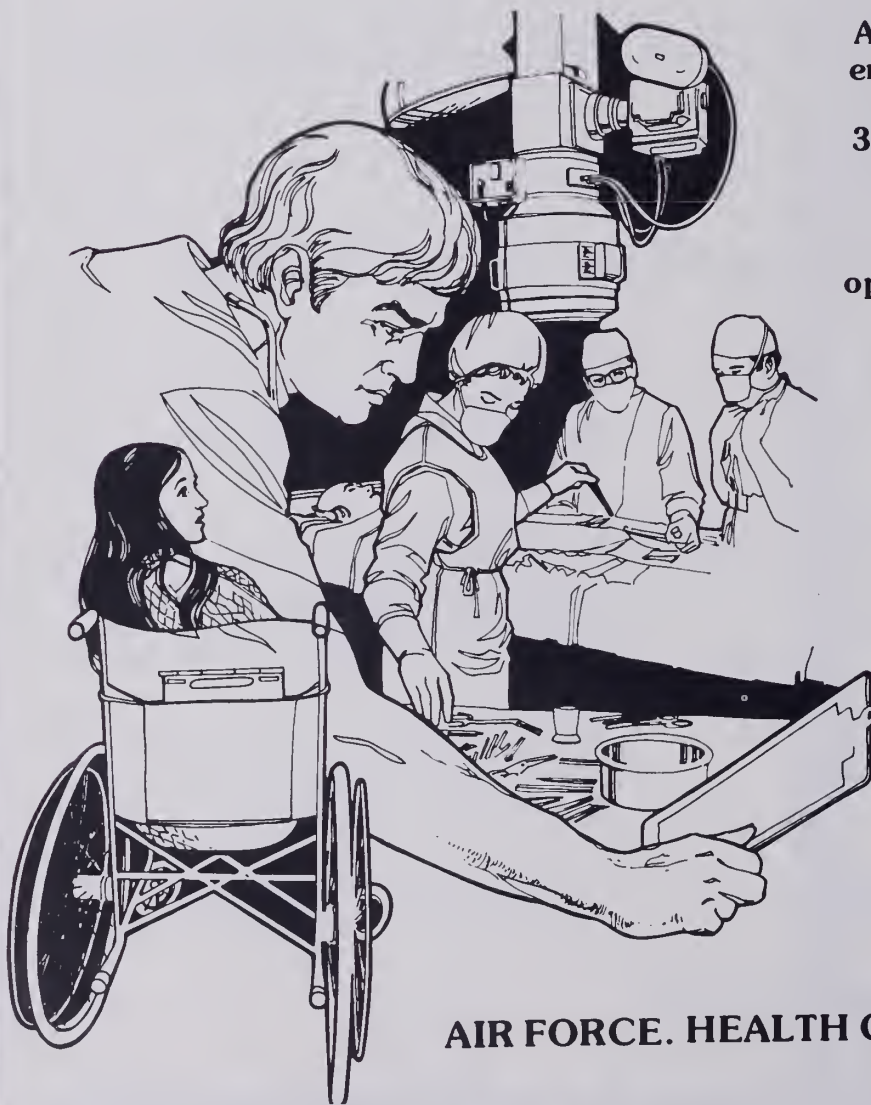
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## EDITORIAL

### No! No! Not by the Blade

**A**UTHOR Herman Melville observed that “mishaps are like knives; they either serve us or cut us, as we grasp them by the blade or the handle.”

I thought of this quotation when I read an editorial in the *Louisville Courier-Journal* last Thanksgiving. In that piece, the editor extols the virtues of Health Maintenance Organizations (HMOs) in Minneapolis, Minnesota. A comparison is made between the eight HMOs in the Twin Cities area and the four in Kentucky, pointing out that in the past seven years HMO enrollment in the Twin Cities has gone from 2% of the population to 12%. Now, I don't see that as phenomenal growth. The statistics may represent a six-fold increase but that represents only 1.4% annual growth. This is hardly an encouraging statistic for the proponents of HMOs.

The editorial further comments that one of the newest HMOs was formed in self-defense by physicians who were alarmed by requests to send their patients' records to other HMOs.

I feel that the private sector has nothing to fear or envy about HMOs, as it delivers medical care faster, better, and with more feeling than any HMO; we just don't do it as inexpensively. But remember, the monthly member payment does not fully fund nor support HMO's expenses and the Federal government must pump millions of dollars into them, both to get them started and keep them going.

“The profit from an HMO lies in keeping people healthy, since that means lower cost,” states the editorial. That is a slight oversimplification. The expenses of medical care come not from keeping people well, but in their recovery after illness

strikes. Preventive medicine is good and sound, but not all illness and disease are preventable. The cost of diagnosis and treatment, whether by HMOs or private physicians, will be the same.

Finally, there is a refreshing bit of candor from the editor as he confesses that “among the chief complaints about HMOs are inconveniently-located central clinics, long waiting lines, and difficulty in forming doctor-patient relationships.” The editor implies that these problems can be overcome. How? They have not been solved in seven years and I predict they won't, the reasons being initial overuse by the public and ultimate abuse by the recipients because of the single fee for unlimited visits and services. So what begins as “something for nothing” winds up as “nothing for something,” the something in the latter case being tax dollars pumped into another floundering behemoth.

This is not a vendetta against HMOs—even though it may read that way. It is more a plea to view the mishap of HMOs and see them as an edge to avoid as opposed to a handle to grasp. To intimate that just because something works it must be all right is improper. The Bataan Death March worked, but there were casualties along the way. I foresee casualties from HMOs if they are to be forever funded by governmental coffers. HMOs should stand on their own merits and meet the test of cost analysis. Let us see if the monthly premium paid will support unlimited use by its recipients and not require governmental support.

If HMOs can do this and remain cost effective while giving quality care for unlimited visits, then it will be a true benefit. However, I fear another mishap.

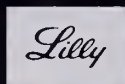
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**INDICATIONS:** *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa; primary pyoderma (impetigo, ecthyma, sycosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the

ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.





## ASSOCIATIONAL NEWS



### Practice Management Workshops Set for April 24-26

Two workshops, cosponsored by the KMA and the AMA Department of Practice Management, are scheduled for April 24-26 at the Ramada Inn, Hurstbourne Lane, Louisville.

"Starting Your Practice," a two-day program designed for young physicians planning to enter private practice and those who have been in practice less than one year, will be held on April 24-25. A varied program will feature informal presentations of useful information about the business procedures and practical problems of establishing a practice. Subjects include paperwork, patient management and public relations, personnel, physical characteristics of a medical office, and legal problems.

Another workshop, "Team Building—A Better Way to Supervise," is scheduled for April 26, and is provided for physicians' office managers. Topics to be discussed at this one-day meeting include employee hiring, motivation, job performance appraisal, and other office procedural techniques.

Registration for both workshops is limited and those who are interested should contact the KMA office as soon as possible.

### Physicians Recruitment Fair is Announced

KMA is finalizing plans for a Physicians Recruitment Fair to be held on October 13 at the Executive West Motel in Louisville. The one-day meeting will be divided into two sessions. The morning session will feature orientation and instructions for representatives from hospitals and communities seeking to recruit physicians for their areas. During the afternoon's Recruitment Fair, exhibitors will have the opportunity to meet with resident physicians from Kentucky and surrounding states and with senior medical students from Kentucky's two medical schools.

Additional information will be sent to KMA members and others as details for the Fair are arranged. For more information, please contact the KMA office.

### COST CUT CORNER

**FEBRUARY**—Try to schedule admissions and discharges to avoid charges for extra days or weekend stays when needed services may not be available. When possible, initiate early discharge planning when you know one of your patients may need extended care facility or home health services following hospitalization.

### Digest of Proceedings Board of Trustees

**December 13-14, 1978**

The second meeting of the KMA Board of Trustees was held on Wednesday evening and Thursday morning, December 13-14, 1978.

President Cooper presented an extensive report of his activities during the Associational year, followed by reports relating to the Headquarters Office and KMA's financial status. Additional reports were presented pertaining to the Board of Medical Licensure, and Senior AMA Delegate, David B. Stevens, M.D., gave a thorough explanation of the AMA Convention held in Chicago earlier in the month.

Several committee chairmen presented reports to the Board and specific action was taken on matters relating to the Committee on Physicians' Health, Ad Hoc Committee on Hospital-Based Specialists, Membership and Placement Services Committee, and the KMA-KNA Joint Practice Committee. Nominations were made for submitting to the Governor a number of recommendations for service on Governor-appointed councils and committees.

Seventh District Trustee, William H. Keller, M.D., discussed a ruling by the Federal Drug Administration pertaining to oxytocin, and a plan of action was outlined. Legal Counsel then reported on a number of legal matters currently having an impact on KMA, and also reported that physician contributions to the state Patients' Compensation Fund should be returned in early Spring of 1979. Three specific lawsuits were reviewed and funds authorized from the KMA Legal Trust Fund for payment of bills.

A full report was submitted to the Board of Trustees concerning actions of the October Executive Committee which were taken to implement actions of the House of Delegates. The Board referred to background material outlining these plans and commented as indicated. Specifically, the Board took action to appoint a committee to implement Resolutions L and Q passed by the 1978 House of Delegates pertaining to 1) participating and non-participating agreements, and 2) primary care reimbursement. In other action the Board adopted a statement concerning second opinions at the request of the Jefferson County Medical Society. Following a presentation by the Committee on Health Care Costs' Chairman, Walter I. Hume, M.D., the Board referred detailed recommendations of the committee to a subcommittee of the Board for study and to report back to the Board of Trustees.

The Board also accepted a recommendation of the Executive Committee for KMA to purchase a mini-computer system as outlined in a booklet presented to the Board. The system is expected to be installed at KMA in the Spring of 1979.

Doctor Cooper then discussed state legislative activities, followed by a national legislative activity report by Fred C. Rainey, M.D.

The Board voted to hold the 1979 Annual Meeting at the Ramada Inn Bluegrass Convention Center in Louisville, endorsed a Jaycee program concerning training individuals in cardiopulmonary resuscitation, accepted a Blue Cross and Blue Shield presentation concerning KMA's health insurance program, and took action relating to HEW regulations involving hospitals that had received Hill-Burton funds.

A highlight of the Thursday morning session was a presentation by Ballard W. Cassady, M.D., President and Chairman of the Board of the Kentucky Medical Insurance Company, supplemented by a report from KMIC's Executive Vice President, Mr. Riley Lassiter.

The Board adjourned after setting the date of its next meeting for April 4-5, 1979.



## Trustees' Report

### FOURTH TRUSTEE DISTRICT

**Charles B. Spalding, M.D., Bardstown**

Since there is little change in the district, two problems facing physicians in all medicine, but particularly in rural Kentucky, will be discussed: cost control and regionalization.



**1. Cost Control: A Dilemma.** As far as physicians' fees are concerned, we have been encouraged by KMA (Special Call Session concerning one geographic area) to raise and update fees so that colleagues may be reimbursed fairly. Now, with government pressure to hold down cost, we are asked not to raise fees.

To compound the problem, it takes over two years to change profiles and with the threat of a freeze on fees, a considerable amount of soul-searching is in order. Another government attempt to control physicians' fees, as predicted by most students of congressional action, will be coercion to accept assignments. This assuredly will be attached to "profiles" as they stand at present. Each member of the district will have to decide whether he should increase fees.

**2. Regionalization.** As promoted by HSAs, Regionalization burst on the scene and seemed destined to completely reregulate how medical services are rendered. The enthusiasm has slowed somewhat after input from smaller communities which were threatened to lose services, or even hospitals. However, there are still efforts to regionalize all services. Most recently, this is regionalization of primary care which has nothing to do with a primary entry of the patient into the health arena. One of the main reasons presented is to hold down cost, but I see no place where money will be saved. I suggest each physician become aware of the process and work now or accept the fact that in a few years, when all medicine is regionalized, he will only be a small cog working without input into, or control of, the direction the wheel of health care is turning.

In the next few months, there will be a representative of the Kentucky Medical Insurance Company visiting in the district. Whether or not you decide to buy stock or insurance, be sure to listen and consider this alternative and what it has already done for you just by being offered. By all comparisons, the stock itself is certainly a good business investment.

Finally, there will be a district meeting in March or April. Information will be forthcoming.



## Members in the news

**John E. "Jack" Trevey, M.D.**, was elected to the Kentucky State Senate on January 9. Doctor Trevey, Lexington, is managing physician for the International Business Machines Corp. in Lexington. He was Kentucky state representative from the 78th House District before his election to the Senate.



## Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

### January

- 3 Emergency Medical Care, Louisville
- 9 Journal Editors, Louisville
- 10 Judicial Council, Louisville
- 11 Paramedic Advisory, Louisville
- 18 Interspecialty Council, Louisville
- 25 Community and Rural Health, Louisville
- 30 EVP Advisory, Chicago

### FEBRUARY

- 1 Physicians Health, Louisville
- 13 Journal Editors, Louisville
- 15 Board of Medical Licensure, Louisville
- 15-18 AMA National Leadership Conference, Chicago

### MARCH

- 7 McDowell House Board of Managers, Danville
- 15 Budget Committee, Louisville

# SPRING CLINICAL MEETING

Kentucky Chapter  
American College of Surgeons

March 9-10, 1979  
Hyatt Regency  
Louisville

## GUESTS:

JOHN A. COLLINS, M.D.  
Professor and Chairman  
Department of Surgery  
Stanford University

THORALF M. SUNDT, JR., M.D.  
Professor of Neurosurgery  
Mayo School of Medicine

## FRIDAY

8:30 Scientific Session  
12:00 NURSES LUNCHEON  
1:30 Scientific Session  
5:30 Reception

## SATURDAY

8:30 Scientific Session

## *For Further Information*

JAMES P. MOSS, M.D.  
Secretary-Treasurer  
250 East Liberty Street  
Louisville, Kentucky 40207

Physicians, Nurses, Students, Technicians are invited  
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# Accept no substitute for your professional judgment

As a physician, you have the right to prescribe the drug which you believe will most benefit your patients. Now, substitution laws make it more difficult to exercise that right. In many states, unless you specifically direct pharmacists to dispense your brand-name prescription as written, they may be required by law to substitute another drug for your brand-name prescription.

This means that the ultimate drug selection is no longer yours; its source is left to the pharmacist's discretion. You will have forfeited your right to prescribe as you see fit. Preserve your rights. Specify that you will accept no substitution.

## **When you accept no substitutes...**

- You ensure that your patient receives exactly that product you have specified on your prescription
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- You can support the kinds of research programs that are vital to new drug discovery and development
- You can help sustain important physician, pharmacist and patient education services supported by innovative, research-oriented firms

For complete information on the drug substitution law effective in your state, please consult your local Pfizer Representative.

## Price Standards for Professional Fees Released by the Council on Wage and Price Stability

As part of President Carter's Voluntary Anti-inflation Program, the Council on Wage and Price Stability has established price standards for all professional fees. Professionals complying with the standards must limit an increase in fee for any single service to 9.5%. In addition, the yearly average rate of change for all fees charged may not exceed 6.5%

The AMA Education and Research Foundation, for the 29th consecutive year, will contribute more than \$1 million in unrestricted gifts to medical schools in 1979. However, Hubert A. Ritter, MD, AMA-ERF president, told the House of Delegates that another Foundation program, the Guaranteed Loan Program for residents and students, is lagging \$650,000 from the previous year. "The cost of a medical education is up, the number of students is up, and our future colleagues and professional heirs need us now," he said.



## Did you know . . .

Borys Surawicz, M.D., Lexington, is the 1978-1979 President-Elect of the American College of Cardiology. A native of Russia, Doctor Surawicz received his medical education in Germany, Poland and the United States. Since 1966, Doctor Surawicz has been professor of Medicine in the Cardiovascular Division at the University of Kentucky College of Medicine. He is a past recipient of the KMA Faculty Scientific Achievement Award.

## U of L Medical Alumni Activities American College of Physicians

During the American College of Physicians Annual Session in San Francisco, California, the University of Louisville Medical Alumni Association will host several activities.

March 25-28  
9 a.m. - 5 p.m.

March 25-27  
3 - 5 p.m.

March 27

U of L Information Booth  
Brooke Hall/Civic Auditorium  
(across from registration area)

U of L Hospitality Suite  
Fairmont Hotel

U of L Medical Alumni Reception  
Fairmont Hotel

Room assignments have not been made—please check with the convention information booth for hotel and room number. All alumni, spouses and guests are encouraged to attend the alumni reception to meet members of the Medical School staff and faculty, and renew acquaintances with graduates.

For further information, please contact the H.S.C. Relations Office, Miss Billie Clary at (502) 588-5783.

## In Memoriam

**HARRY L. BAILEY, M.D.**  
Lexington  
1937-1978

Harry L. Bailey, M.D., Lexington, died in a plane crash in December 1978. An orthopaedic surgeon, Doctor Bailey was a team physician for the University of Kentucky. He was a 1962 graduate of the Vanderbilt University School of Medicine.

**MEYER S. JOLSON, M.D.**  
Covington  
1901-1978

Meyer S. Jolson, M.D., Covington, died on December 21, 1978. Doctor Jolson, a general practitioner, was graduated in 1926 from the University of Maryland School of Medicine.

**URSOLO M. MASMITJA, M.D.**  
Glasgow  
1906-1978

Ursolo M. Masmitja, M.D., died in December 1978 at the Kentucky Respiratory Disease Hospital. Doctor Masmitja was in family practice.

**ALONZO W. WRIGHT, M.D.**  
Louisa  
1910-1978

Alonzo W. Wright, M.D., died in December 1978. Doctor Wright was a 1936 graduate of the University of Tennessee College of Medicine, and was in general practice.

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**KMA**  
**Annual Meeting**  
**September 24-27**  
**1979**

**Ramada Inn**  
**Bluegrass Convention**  
**Center**  
**Louisville, Kentucky**



# Application for Scientific Exhibits

1979 Annual Meeting

Ramada Inn/Bluegrass Convention Center

Kentucky Medical Association

Louisville, Kentucky

September 25, 26, 27

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before July 1, 1979.

## ACCREDITATION



KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category 4 credit.

1. Title of exhibit \_\_\_\_\_
2. Name(s) of exhibitor(s) \_\_\_\_\_  
Address \_\_\_\_\_  
Professional title \_\_\_\_\_
3. Institution if other than exhibitor \_\_\_\_\_
4. Amount of backwall footage required \_\_\_\_\_  
(The draped booth has 4' side walls. This footage should not be included in backwall footage required.)  
SHELF DESIRED? \_\_\_\_\_ (Shelf is 2' deep X width of backwall footage)
5. Will summary printed matter be available or obtainable for the interested physician? \_\_\_\_\_
6. Indicate sources of assistance provided to you in connection with this exhibit \_\_\_\_\_
7. Has this exhibit been displayed before? If so, when & where? \_\_\_\_\_
8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date \_\_\_\_\_

Signature of Applicant \_\_\_\_\_

Fill Out and Mail to:

 **RICHARD A. KIELAR, M.D., Chairman**  
Scientific Exhibits Committee  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205 

- KMA provides, without cost to the exhibitor, simple shelves, bracket lights and a title sign.
- Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202
- Transportation and erection costs are the responsibility of the exhibitor.
- Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.
- Equipment which will create noise should not be used during the general sessions and, at other times, should be controlled by head or earphones or a muffling device.

## **AD HOC COMMITTEE ON INSURANCE PROCEDURES AND PRIMARY CARE REIMBURSEMENT TO HOLD SPECIAL MEETING**

**April 1, 1979, Executive Inn, Louisville**

The KMA Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement will hold a special meeting at 10:00 a.m. on Sunday, April 1, at the Executive Inn, in Louisville. The Committee, which is charged with the development of a report on the issue raised in Resolutions L and Q, passed at the 1978 KMA Annual Meeting, was appointed recently by the Board.

Resolution L called for the Committee to hold a well-publicized meeting to allow KMA members to discuss the Blue Shield Participating Physician's Agreement; the desirability of establishing a similar agreement with other insurers; consideration of reimbursement of physicians by assignment of fees; consideration of the relative merits of various types of insurance and any other significant matters related to health insurance determined at the general meeting.

Resolution Q called for the same Committee to study third party reimbursement systems to remove imbalances in the payment of primary care as compared to non-primary care services and to study the composition of the KMA Advisory Committee to Blue Cross and Blue Shield.

Tentative plans are for the Committee to hear testimony relating to the issues raised in Resolution L at the April 1 meeting. Issues evolving around Resolution Q will be discussed at a separate committee session. In order for the appropriate arrangements to be made, Committee Chairman, James Baumgarten, M.D., Owensboro, has requested that physicians planning to comment on the issues discussed in Resolution L forward their name and topic of discussion to the Headquarters Office to ensure that adequate time can be devoted to each of the questions raised. The members serving on the Ad Hoc Committee are as follows:

**James A. Baumgarten, M.D., Owensboro, Chairman**

Fred C. Rainey, M.D., Elizabethtown

Glenn W. Bryant, M.D., Louisville

Harold D. Haller, M.D., Louisville

Robert S. Tillett, M.D., Louisville

Carl J. Brueggemann, M.D., Covington

Ronald D. Hamilton, M.D., Lexington

Nelson B. Rue, M.D., Bowling Green

Thomas L. Heavern, Jr., M.D., Highland Heights

Bennett L. Crowder, II, M.D., Hopkinsville

James B. Holloway, Jr., M.D., Lexington

**Kenneth P. Crawford, M.D., Louisville**

**Before prescribing, please consult complete product information, a summary of which follows:**

The effectiveness of Valium (diazepam) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindications:** Tablets in children under 6 months of age, known hypersensitivity; acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy

**Warnings:** As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

**Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**ORAL:** Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

**INJECTABLE:** To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins, i.e., dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest, concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status.

Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence, can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

**Precautions:** If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), i.e., phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

**INJECTABLE:** Although promptly controlled, seizures may return; readminister if necessary, not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

**Adverse Reactions:** Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported, should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

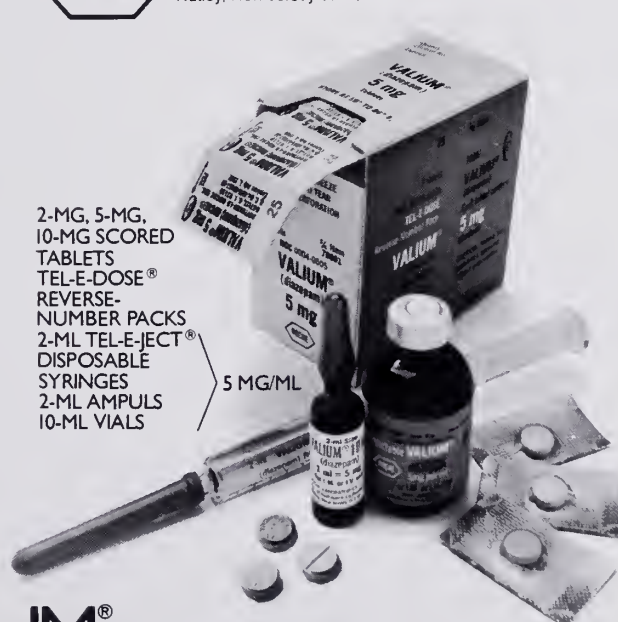
**INJECTABLE:** Venous thrombosis/phlebitis at injection site, hypoactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

**Management of Overdosage:** Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure, employ general supportive measures, IV fluids, adequate airway. Use levarterenol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects. Dialysis is of limited value.

**Supplied:** Tablets, 2 mg, 5 mg and 10 mg, bottles of 100 and 500; Tel-E-Dose® (unit dose) packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Ampuls, 2 ml, boxes of 10. Vials, 10 ml, boxes of 1, Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.

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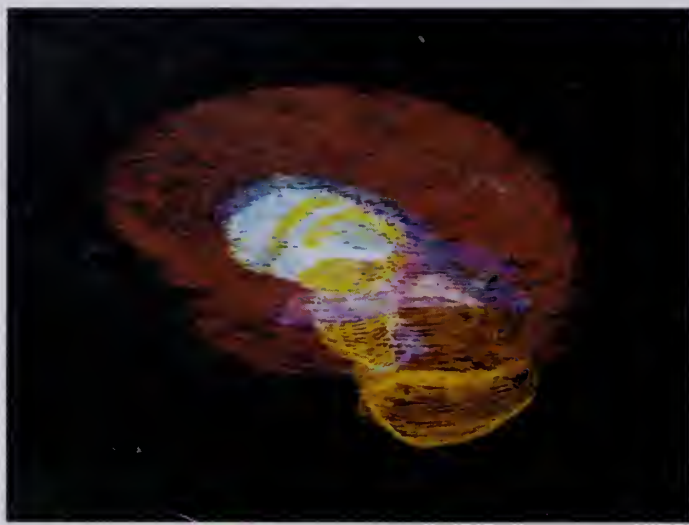


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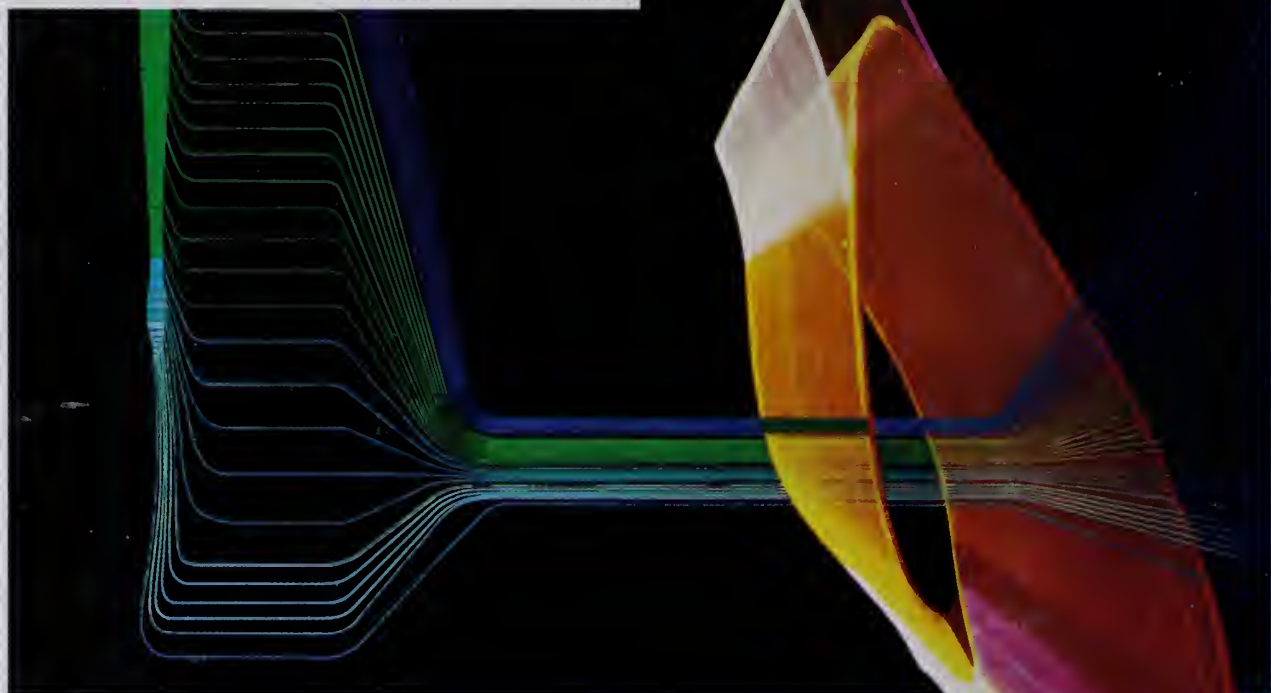
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Please see preceding page for a summary of product information.

ROCHE

March 1979  
Volume 77  
Number 3

In this issue: Postsplenectomy Arteriovenous  
Fistula, Choosing Antimicrobial Agents—  
Part 3, Renal Vein Thrombosis, Alcoholism  
Today, Association News and much more.

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# The Journal Of The Kentucky Medical Association



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## VALIUM® (diazepam)

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication. Abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

**Use in Pregnancy:** Use of minor tranquilizers during first trimester should always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, dizziness,

hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.

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# The Journal Of The Kentucky

## Medical Association

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# MESSAGE FROM THE PRESIDENT



**O**N my desk is a cartoon showing a very large foot labeled "Medicare," showing a foot pushed through a door entitled "Foot in Door." I cut this out of a journal several years ago and noted many times since that it was a true prophet. More recently, I read an excerpt from a commencement speech given to the medical students at the University of Rochester by the Chancellor, W. Allen Wallis, which said, "You may find lawyers defining the range of treatment you are allowed to use in specific circumstances. Lawyers may prescribe the criteria by which you are to choose among the allowable treatments. Lawyers may require you to keep detailed records to establish at all times that you are in full compliance. Lawyers may punish you unless you can refute beyond a reasonable doubt their presumption that failures result from not following all their regulations." Here is another prophet of the potential future of health care.

Twenty years ago, when I opened my office, I was required to register my license at the court house, obtain a narcotic number from the Federal Board of Narcotics, and pay my income tax. Essentially, that was all the contact I had with the levels of government. Since that time the contact has multiplied logarithmically.

In 1963, I was introduced to the planning process when the federal government voted money to help Appalachia. Initially, it seemed potentially beneficial since it was primarily a means for distributing appropriately some newly available money to the health industry of Appalachia. Subsequently, the public assistance and Medicare programs were initiated in 1965 and with it all of the attendant changes and constricting rules and regulations have become our way of life. More recently, our state has gone through a mandated "Project Integrity," and there are plans to extend this into every physician's office. For years, Congress has been considering various national health insurance programs, and the warning from Washington is not whether or not we will have national health insurance but rather how much. The question now is, can we exert any control over our destiny? I believe that we must try. Physicians must join in a concerted effort to influence the course of medical care. It will not be easy and will require active participation by all physicians, not only in the medical profession but in political matters as well. If we fail, the patients in our country as a whole will be denied the level of care that would otherwise be possible.

Now, it is imperative that all physicians join together to present a unified position dedicated to improving medical care. We need all the physicians in Kentucky working with KMA and KEMPAC. Our support is needed on the national level as working members of the AMA and AMPAC, as well as our local efforts to continue to provide high caliber medical care in a free atmosphere which is neither binding to the patient or physician with stifling laws and regulations.

HAROLD L. BUSHEY, M.D.  
KMA Vice President

*This is the second in a series of articles written at the request of Carl Cooper, Jr., M.D., KMA President.*





## POSTGRADUATE OPPORTUNITIES



### IN KENTUCKY

#### MARCH, 1979

- 9-11 Advanced Cardiac Life Support\*\*
- 12-13 Neonatal Transport\*  
Hyatt Regency, Lexington
- 23-24 Rheumatology Symposium\*  
Hyatt Regency, Lexington
- 29 Common Skin Disorders\*\*

#### APRIL, 1979

- 2-3 Medical Aspects of Sports\*  
Hyatt Regency, Lexington
- 5 24th Annual Spring Clinic Conference, Lexington Clinic, Lexington, Kentucky. Contact Phillip Martin, Lexington Clinic, 1221 South Broadway, Lexington, Kentucky 40504, or call (606) 255-6841.
- 20-21 Endocrinology for the Practicing Physician\*  
Hyatt Regency, Lexington
- 23-26 Surgical Anatomy\*\*
- 25-27 Advances in the Therapeutics of Internal Medicine (American College of Physicians)\*, Hyatt Regency, Lexington
- 26-28 High Risk Pregnancy\*\*
- 26-30 Modern Management of Major Problems in Surgery\*\*

#### MAY, 1979

- 6-11 Hand Surgery, Marriott Inn. For information call (502) 588-6185.
- 10-12 KAFP Annual Scientific Meeting, Ramada Inn, Hurstbourne Lane, Louisville.
- 17-18 Current Concepts in Diagnosis and Management of Colorectal Carcinoma, Hyatt Regency, Louisville. Co-sponsored by Norton Infirmary and Dept. of Surgery, U of L. For information, contact Frank F. Coffey, (502) 589-8231.
- 23 Problems of Sepsis, University of Louisville Health Sciences Center. For information call (502) 588-6185.

#### JUNE, 1979

- 22-28 5th Family Medicine Review,\* Galt House

#### SEPTEMBER, 1979

- 24-27 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

#### OCTOBER, 1979

- 17-18 Hypertension 1979,\*\*
- 20 Kentucky Regional Meeting, American College of Physicians, Hyatt House, Louisville.

#### NOVEMBER, 1979

- 11-16 1st Annual Family Medicine Update, Hyatt House, Louisville. For information call (502) 588-6185.

#### DECEMBER, 1979

- 7-8 Renal Failure,\*\*

\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

\*\*For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

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**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-lactone is used concomitantly, determine serum K<sup>+</sup> frequently; both can cause K<sup>+</sup> retention and elevated serum K<sup>+</sup>. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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**When painful spasm  
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...in the functional bowel/irritable bowel syndrome\*

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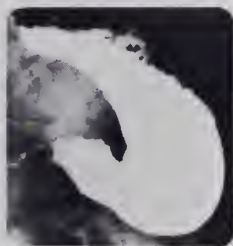
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*"The correlation of spasm relief and drug given was excellent."*

\*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

#### Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy), obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis), paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis, myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage:** Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>®</sup> (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

# KMA

## Annual Meeting

### September 24-27

## 1979

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# A Link in the Chain



Mrs. Manuel A. Bergnes  
AMAA President

The Auxiliary to the Kentucky Medical Association will hold its 57th Annual Convention, April 23-25 at the Hyatt Regency Hotel in downtown Lexington, Kentucky. This is an invitation to all physicians' spouses to join us and help make our second Spring Convention a very successful one.

The Auxiliary is honored to have as its guest the President of the American Medical Association, Auxiliary, Mrs. Manuel A. Bergnes. Mrs. Bergnes will address the House of Delegates as well as install the officers for the 1979-1980 year.

Mrs. Bergnes has served as county and state president of Pennsylvania. She was installed as National President of the Auxiliary at the organization's 1978 June convention in St. Louis, Missouri.

Mrs. Bergnes and her husband live in Norristown, Pennsylvania, where Doctor Bergnes is a pathologist and Director of Laboratory Services at Sacred Heart Hospital in Norristown.

## CONVENTION 1979

### "WE CARE"

#### MONDAY, APRIL 23

- 1:00 p.m. - 3:00 p.m. .... Budget Meeting
- 3:00 p.m. - 5:00 p.m. .... Long-Range Planning Committee Meeting
- 5:00 p.m. - 6:00 p.m. .... Program Development Committee Meeting

#### TUESDAY, APRIL 24

- 9:00 a.m. .... Registration and Set-Up Exhibits
- 10:00 a.m. - 11:15 a.m. .... Pre-Convention Board Meeting, 1978-79 Board Members
- 11:30 a.m. - 12:45 p.m. .... Luncheon-Guest Speaker: Dr. Carl Cooper, President  
KMA  
Presentation of AMA-ERF Contributions
- 1:00 p.m. - 4:30 p.m. .... AKMA House of Delegates Session
- 6:00 p.m. - 7:00 p.m. .... Reception Honoring President-Elect Mrs. Gordon Betts  
and the 1979-1980 AKMA Officers
- 7:00 p.m. .... Dinner, Honoring Past AKMA Presidents and 1978-79  
County Presidents  
Installation of 1979-80 AKMA Officers  
View Exhibits

#### WEDNESDAY, APRIL 25

- 8:00 a.m. .... Breakfast
- 9:00 a.m. - 11:30 a.m. .... Post-Convention Board Meeting, 1979-80 Board Members
- 12:00 Noon .... Check-out Time  
Lunch and Shopping on Own in the Mall-Tours Available

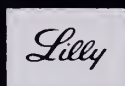
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# *The* JOURNAL *of the* Kentucky Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE BOARD OF TRUSTEES

VOLUME 77

MARCH 1979

NUMBER 3

## Postsplenectomy Arteriovenous Fistula Causing Portal Hypertension

Gordon L. Hyde, M.D.

Lexington, Kentucky

An arteriovenous fistula occurring six years after splenectomy and causing portal hypertension was demonstrated by selective splenic arteriogram. Excision of the fistula relieved the portal hypertension, and two years postoperatively, the patient is asymptomatic. Formation of fistulae can be avoided by individual ligation of the splenic artery and vein when splenectomy is performed.

**A**LTHOUGH arteriovenous fistulae following surgical procedures have been reported frequently, an arteriovenous fistula between the splenic vessels following splenectomy has been reported only twice.<sup>1,2</sup> I wish to report a third such case, in which the fistula caused portal hypertension.

### Report of a Case

A 66-year-old woman underwent vagotomy and pyloroplasty in May 1969. During the procedure, the splenic capsule was torn, and splenectomy was performed. Except for a minor episode of pneumonitis, her postoperative course was benign, and she was discharged from the hospital doing well. She continued to do well for about

six years, when she developed systemic hypertension. She also had cardiac disease, for which she was being observed by her internist.

In January 1976, the patient was found to have a bruit in the left upper quadrant and in the left lateral flank. Renal artery hypertension was considered, but the bruit was located at such a distance laterally that some other source of the bruit was sought, possibly one related to the splenectomy. Accordingly, she underwent a selective splenic arteriogram in January 1976, which disclosed a very large arteriovenous fistula between the splenic artery and the splenic vein, as well as a huge portal venous system (Figures 1,2). An upper gastrointestinal examination revealed possible esophageal varices. Unfortunately, endoscopic examination was not performed.

On January 22, 1976, the patient underwent excision of the arteriovenous fistula. Doppler ultrasound examination demonstrated a very large bruit over the left flank. After many adhesions were lysed and the tail of the pancreas exposed, a thrill was detectable. Portal venous pressure was 330 mm H<sub>2</sub>O. The fistula was isolated and occluded, and the thrill immediately disappeared and portal venous pressure decreased to 130 mm H<sub>2</sub>O. The excised fistula measured 5 mm.

Pathologic examination revealed an arteriovenous communication in the distal tip of the pancreas, where the vein and artery had previously been ligated.

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Figure 1. Early phase AV fistula.

The patient tolerated the procedure well, had an uneventful postoperative course, and has continued to do well two years postoperatively, having only mild hypertension.

#### Discussion

Splenic arteriovenous fistulae following splenectomy are extremely rare. Thirty-eight cases of arteriovenous communications between the entire portal and venous systems from all causes have been reported. Half of these were communications in the splenic bed. However, most of the diagnoses were made at autopsy, and only occasionally by arteriography preoperatively. Almost all were congenital, arteriosclerotic, infectious, or idiopathic in origin.<sup>3</sup> Patients usually had portal hypertension, high-output cardiac failure, or mesenteric venous congestion.

Arteriovenous fistulae occurring after any surgical procedure are fortunately uncommon, but many cases have been reported since it was first described by Weigert.<sup>4</sup> Many locations have been described, including the superior thyroid



Figure 2. Late phase large portal venous system.

vessels following thyroidectomy,<sup>5</sup> following hysterectomy,<sup>6</sup> after excision of intervertebral discs,<sup>7,9</sup> after insertion of Steinman pins, and following excision of semilunar cartilages.<sup>8</sup> Rare occurrences have followed use of needles, wires, pins, and other devices to immobilize bones, which have been inserted near the known anatomic course of blood vessels.<sup>8</sup> Since it is apparent that an arteriovenous communication can occur in a variety of operations and in a variety of locations, it is surprising that splenic arteriovenous fistulae are not commonly considered in the etiology of portal hypertension and may not be recognized as the cause.

An arteriovenous fistula is most likely to be produced when vessels are ligated with transfixion sutures.<sup>1</sup> Elkins,<sup>6</sup> however, pointed out that mass ligation of arteries and veins may also be the cause of fistulae. This is critically important and emphasizes the caveat that only one vessel should be included in a ligature. Furthermore, needles, wires, pins, and other devices for immobilization of bone should not be inserted near the known anatomic course of blood vessels.<sup>8</sup>



### Comment

This patient had an arteriovenous fistula between the splenic artery and splenic vein resulting in portal hypertension, which was fortunately recognized early. Following excision of the fistula, the patient has had no evidence of portal hypertension, no varices, and no bruit or other signs and symptoms suggestive of persistent communication. A postoperative arteriogram was not obtained, but endoscopy and upper gastrointestinal series showed normal results.

This problem is best avoided by individual ligation of the splenic artery and vein when splenectomy is performed. However, if postoperative portal hypertension does occur and is recognized to result from formation of a fistula, it can be easily managed, in contrast to portal hypertension

from other causes which generally presents complicated and difficult surgical problems.

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# A Clinical Approach to the Choice of Antimicrobial Agents, Case Number 3.

## Sepsis From Decubitus Ulcers and Complications of Therapy

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Louisville, Kentucky

This is the third in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics.

A 74-year-old mentally retarded white female was admitted to hospital from a nursing home. During the preceding week she had become increasingly lethargic and on the day of admission had refused oral intake. The nursing home staff noted her pulse to be rapid and thready and her rectal temperature 101.4°F.

On admission, vital signs included pulse 102/min supine and 128/min sitting, rectal temperature 102°F; respirations 28/min; and blood pressure 104/60 mm Hg. Mucous membranes were dry and skin turgor diminished. A 4x6 cm foul-smelling sacral decubitus ulcer was present and there were erythematous areas over both femoral trochanters and the right lateral malleolus.

Hemoglobin was 16.2 gm/dl; hematocrit 48%; WBC count 21,400/mm<sup>3</sup> with 75% neutrophils, 15% bands and 10% lymphocytes. Serum electrolytes reflected a metabolic acidosis (21 meq/L anion gap) superimposed on respiratory alkalosis with HCO<sub>3</sub> of 16 meq/L. The BUN was 44 mg/dl, and creatinine 1.5 mg/dl. Arterial blood gases were pO<sub>2</sub> 26 mm Hg; pH = 7.36. Urinalysis revealed a specific gravity of 1.024 without other significant findings. Chest x-ray was normal.

Appropriate management at this time would include which of the following:

- A. Cephalothin (Keflin®) 2 gms IV q 6 h
- B. Penicillin G, 10,000,000 U IV q 12 h by continuous drip
- C. Clindamycin (Cleocin®) 450 mg IV q 4 h and Tobramycin (Nebcin®) 1.5 mg/kg of body weight IV q 12 h (adjusted for the serum creatinine of 1.5 mg/dl)
- D. Ampicillin 2 gms IV q 4 h
- E. Chloramphenicol 1 gm IV q 6 hr.

**Answer: C or E**

This patient required hospitalization because of severe dehydration and sepsis, as should be suspected from electrolyte and arterial blood gas abnormalities which reflect hyperventilation and probable lactic acidosis in the absence of another explanation.

Upon hospitalization the patient should have aerobic and anaerobic cultures of blood and material obtained by debridement of the decubitus ulcer. Sepsis or bacteremia is a frequent concomitant of decubitus ulcers.<sup>1</sup> In one study, documented bacteremia occurred in 19 of 24 patients with decubiti. The bacteremia was polymicrobial in about one-half of these, and *Bacteroides fragilis* was isolated from 58%.<sup>2</sup> The most important feature of the management of these patients was surgical debridement. Those receiving antibiotics alone had a 67% mortality rate compared to 14% among those managed surgically while also receiving appropriate antibiotics.

Cephalothin (Keflin®) would not be an adequate choice. It is ineffective against *B. fragilis*, and many gram-negative aerobic bacilli isolated from institutionalized patients may also be resistant to cephalothin. Cefoxitin (Mefoxin®), a newer cephalosporin, might be adequate as it has activity against *B. fragilis* and may be effective against strains of *E. coli*; *Klebsiella pneumoniae*; both indole positive and negative *Proteus* sps;

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and *Enterobacter* spp, many of which are resistant to cephalothin. Unfortunately, it is not effective against *Pseudomonas aeruginosa* and several other gram-negative pathogens.

Cefamandole (Mandol®) has better activity than cefoxitin against the aerobic gram-negative bacilli mentioned above but unfortunately has little or no *in vitro* effectiveness against most strains of *B. fragilis*, and therefore should not be used when this latter organism is likely to play a major role in the pathogenesis of the infection.

Ampicillin and penicillin are both inadequate because of their lack of effectiveness against *B. fragilis* and their limited spectrum of activity against the aerobic gram-negative bacilli likely to be encountered in this setting.

Chloramphenicol is a reasonable choice. It offers effective antimicrobial activity against many gram-negative aerobic bacilli, most pyogenic cocci (*S. aureus*, Streptococci, etc.) and in addition has activity against most anaerobic organisms, including *B. fragilis*. Unfortunately there have been rare clinical failures using chloramphenicol against apparently sensitive strains of *B. fragilis*;<sup>3</sup> some aerobic gram-negative bacilli may be resistant; and there is the potential for severe toxic effects. However, these features should not preclude its use when deemed appropriate, and it is usually quite effective.

Therefore it is felt that clindamycin (Cleocin®) plus an aminoglycoside (gentamicin, tobramycin or amikacin), is the **best** initial choice in this case. The combination provides coverage by tobramycin against "resistant" gram-negative aerobes, and clindamycin is usually quite adequate in managing infection due to *Bacteroides fragilis* and other anaerobic pathogens. The dosage of tobramycin (Nebcin®) was adjusted to compensate for the elevation in serum creatinine, but serum tobramycin levels should be assayed frequently in order to regulate doses accurately.

The patient was begun on clindamycin and tobramycin, and the ulcer was debrided. Three of three blood cultures grew *Bacteroides fragilis*, and *Escherichia coli* was also recovered from two of these. *B. fragilis* was also isolated from the decubitus ulcer. Clindamycin and tobramycin were continued, and the patient became afebrile.

Laboratory parameters returned to normal, and the serum creatinine, which had been closely monitored, decreased to 1.1 mg/dl. The ulcer was grafted on the tenth and antibiotics discontinued on the 14th hospital day. Four days later, the pa-

tient began to have diarrhea, passing approximately 10 loose stools per day, some of which contained mucus and streaks of blood. On examination, her abdomen was diffusely tender, but there were no other positive findings, and she was afebrile. WBC count was 15,400/mm<sup>3</sup> with 64% neutrophils, 32% lymphocytes, 3% monocytes, and 1% eosinophils. At this point you would:

- A. Restart clindamycin
- B. Obtain surgical consultation for bowel perforation
- C. Begin diphenoxylate HCl with atropine (Lomotil®)
- D. Examine stool smears with Wright's stain, culture and perform proctosigmoidoscopy
- E. Begin cholestyramine 4 gm p.o. tid

**Answer: D**

The symptom complex described above makes antibiotic-induced pseudomembranous ulcerative colitis (PMC) the most likely diagnosis. Although PMC has been described following therapy with penicillins<sup>4,5</sup> and cephalosporins,<sup>5,6</sup> it is most frequently associated with clindamycin and lincomycin.<sup>7</sup> A positive stool guaiac and the presence of leukocytes in Wright's stained stool smears are highly suggestive of colitis. Most patients with PMC have abnormal barium enemas, but the radiologic findings are usually nonspecific.<sup>8</sup> Sigmoidoscopy with biopsy is the definitive diagnostic procedure in the evaluation of patients suspected of having PMC. The sigmoidoscopy usually reveals plaque-like exudates and pseudomembranes, although the colon can occasionally appear normal. The biopsy will nevertheless show a characteristic histopathologic picture.

Although an acute abdomen must be considered in the differential diagnosis, antibiotic-associated colitis is far more likely in this case and can be readily ruled in or out utilizing the procedures described above. C and E are less desirable choices because they are therapeutic and do not lead to a diagnosis.

The diagnosis of PMC was established by sigmoidoscopy and trans-sigmoidoscopic colonic biopsy. Therapy should now be instituted with:

- A. Cholestyramine orally
- B. Vancomycin orally
- C. Lomotil® orally
- D. Clindamycin (Cleocin®) intravenously
- E. Hydrocortisone (Solu-cortef®) intravenously

**Answer: B**



The pathophysiologic process leading to the clinical syndrome PMC has now been shown to be due to the cytotoxic effects of an exotoxin produced by *Clostridium difficile*.<sup>9-11</sup> This organism is present as part of the normal bowel flora in a small percentage of individuals. During therapy with various antibiotics, but particularly with lincomycin and clindamycin, overgrowth of *Clostridium difficile* occurs as a result of quantitative and qualitative changes in the colonic flora. It is the exotoxin of *Cl. difficile* which is responsible for the mucosal changes of PMC. It should be noted that only a small percentage of individuals treated with these drugs develop PMC.

There is evidence that cholestyramine may bind negatively-charged toxic products,<sup>12</sup> and this agent has been used with varying degrees of success in the treatment of this syndrome.<sup>4,12</sup> However it is not the best choice. Lomotil® has been used to help relieve symptoms but has no effect upon either *Cl. difficile* or its exotoxin. Choice D, Clindamycin, is also obviously incorrect as it was the initial cause of the problem. Corticosteroids are generally ineffective in the treatment of PMC.<sup>8,13</sup>

Vancomycin (Choice B) appears to be the therapy of choice for PMC.<sup>5,14</sup> It is given orally, is not well absorbed from the gastrointestinal tract, and is effective in eradicating toxigenic *Cl. difficile* from the colons of most patients affected by PMC. It is given as 500 mg po qid. It should be noted here that the PMC developed after discontinu-

ance of clindamycin therapy in the case described above. Often it may appear during a course of therapy and should this occur, clindamycin should be discontinued.

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# GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

## Renal Vein Thrombosis

Although more than a century has passed since the original description of renal vein thrombosis (RVT), the importance of this entity in the spectrum of renal disease has only recently been appreciated. In most textbooks of nephrology, RVT receives only brief mention as a "cause" of nephrotic syndrome. The literature contains many single case reports and small series; often the diagnosis had been made post-mortem.

Several more recent reviews suggest that it is a much more common entity than has been generally recognized and that a relatively constant constellation of clinical and angiographic findings should make establishment of a diagnosis achievable during life in most cases. Since anticoagulation appears to greatly improve prognosis, early diagnosis and prompt institution of therapy are important to the survival of the patient. Finally, an interesting debate has been generated over which occurs first, the nephrotic syndrome or the renal vein thrombosis.

### Report of a Case

J.G., a 52-year-old black male was first admitted to the Louisville Veterans Administration Medical Center in August, 1977 with a 10-week history of lower extremity edema progressing to generalized anasarca and scrotal edema over the last two weeks. He noted increasing dyspnea on exertion and abdominal girth, and his urine was described as "smoky-colored." He admitted to nocturia two to three times nightly, but denied dysuria or flank pain. He denied any family history of renal disease, recent sore throat or skin infection, exposure to toxins or chemicals, or prior renal disease or hypertension. He had been started on 250 mg of Aldomet® four times daily, 120 mg of furosemide daily, 25 mg of spironolactone daily, and 0.25 mg of digoxin daily by his family physician for these findings. The remainder of his history was unremarkable.

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On admission, his blood pressure was 140/80mmHg. His chest and heart examinations were unremarkable. His abdomen was distended with ascitic fluid precluding identification of any organomegaly. He had pitting edema below the umbilicus involving the penis, scrotum and lower extremities. The remainder of the examination was unremarkable.

His hematocrit was 39 vol % and his white cell count was 8,900. His blood urea nitrogen was 10 mg/100cc, his serum creatinine was 1.3 mg/100cc, his total serum protein was 4.5 gm/100cc with albumin 1.4 gm/100cc, and his serum cholesterol was 400 mg/100cc. His urinalysis with a specific gravity of 1.020 showed 4+ proteinuria, no glucose, and gross hematuria. His 24-hour urine protein excretion was 8.7 gm, and his urine culture showed no growth. His serum electrolytes, and all other components of the SMA-18, were within normal limits. His intravenous pyelogram showed two large kidneys (15.2 & 16.2cm in length on the left and right respectively) without other abnormalities. His inferior vena cavagram and retrograde inferior vena cavagram showed no visualization of the renal veins, and a filling defect in the inferior vena cava at the level of the renal veins consistent with a clot (Figure 1). The renal biopsy showed a mild membranous nephropathy (Figure 2) demonstrating thickening of the basement membranes, focal mesangial hypercellularity and epimembranous deposits identified with fluorescence microscopy, as containing immunoglobulin G and B<sub>1</sub>C component of complement.

The patient was anticoagulated with coumarin but developed a severe iron deficiency anemia secondary to gastrointestinal bleeding. This required discontinuation of anticoagulants. An extensive workup of the gastrointestinal tract showed no source for bleeding other than internal hemorrhoids. His most recent 24-hour urine protein excretion was almost 10 grams, his blood urea nitrogen was 61 mg/100cc, and serum creatinine was 9.8 mg/100cc.

### Discussion

**Historical review and incidence.** Although Rayer first reported in a French textbook in 1840 ten cases of renal vein thrombosis (two with nephrotic syndrome), it was not until 1939 that Derow first reported the association between nephrotic syndrome and renal vein thrombosis in the English-speaking literature.<sup>1</sup> In 1956,





Figure 1. This inferior vena cavagram shows an extensive filling defect (between arrows) at the roots of both renal veins with no visualization of either renal vein consistent with bilateral renal vein thrombosis and extension of clot into the inferior vena cava. A retrograde inferior vena cavagram showed the same filling defect.

Pollak, et al<sup>2</sup> reviewed 16 cases in the literature describing this association showing it to be a rare occurrence even at this recent date. McCarthy, et al<sup>3</sup> in 1963 reviewed 29,280 consecutive autopsies performed at the Mayo Clinic and found 17 cases of renal vein thrombosis (0.6 cases per 1000 necropsies). Only two had clinical nephrotic syndrome. Kowal, et al<sup>4</sup> in the same year, in order to determine survival, reviewed the world literature and identified a total of 65 cases. In 1968, Rosenmann, et al<sup>5</sup> reviewed a sizable personal experience, with 15 cases collected from one medical center suggesting that this was a more common entity than had been previously appreciated. Llach, et al<sup>6</sup> published a prospective study on 36 nearly consecutively biopsied nephrotics to establish the true incidence of renal vein thrombosis associated with nephrotic syndrome and in an attempt to establish which came first, the nephrotic syndrome or renal vein thrombosis. They found that 12 (33%) of their nephrotic patients had evidence of renal vein thrombosis; two thirds of these were asymptomatic and would not have been suspected if inferior vena cavaograms had not been done routinely on all nephrotics giving their permission. Furthermore, three additional patients developed renal vein thrombosis during a three-year followup period that had been documented by repeat inferior vena cavagrams. The most recent report by Cade, et al<sup>7</sup> describes the Gainesville, Florida experience with 28 patients collected from a single medical center over a 5-year period.

**Clinical Manifestations.** The clinical manifestations of renal vein thrombosis may be sudden or insidious in onset. In infants, acute RVT results in a hemorrhagic infarction of the kidneys or kidneys with hematuria,

oliguria or anuria, progressive azotemia and nephromegaly. If bilateral, it is rapidly fatal. In adults, acute RVT results in irreversible anuria but with less severe histological changes, specifically interstitial edema and fibrosis and scattered tubular atrophy.

When RVT is insidious in onset, as it is in the great majority of cases, it is associated with nephrotic syndrome with or without azotemia. The proteinuria may be massive (>20 gm/day) associated with hematuria and sterile pyuria. It tends to be variable with two-fold or greater changes occurring over a period of several days to weeks. Epigastric pain and costovertebral angle pain and tenderness are the most consistent symptoms. The kidneys are often so enlarged they become palpable and the enlargement may be asymmetrical. Fever, leukocytosis, gastrointestinal complaints, and vascular collapse may occur. The association of thromboembolic complications also suggests RVT. The severity of the azotemia is dependent on the ability to establish and maintain patent venous collaterals. Cade, et al<sup>7</sup> called attention to additional manifestations of RVT which should be looked for when the diagnosis is suspected. They frequently found a hyperchloremic acidosis due to proximal renal tubular acidosis and a decreased renal tubular threshold for glucose producing a renal glycosuria. These patients also have increased serum and urine fibrin degradation products. The relative frequency of the clinical manifestations of RVT in Cade's study are listed in Table I.

**Radiographic Examinations.** The radiographic findings in RVT are as follows:

(1) There is enlargement of the kidney outline, involving both renal parenchymal and pelvocalyceal systems with asymmetry a common finding (as in our patient, the right kidney tends to be larger as the collateral venous circulation is not as generous as that on the left),

(2) One sees an irregularity ("Scalloping") of the renal pelvis and proximal ureters due to engorged collateral veins,

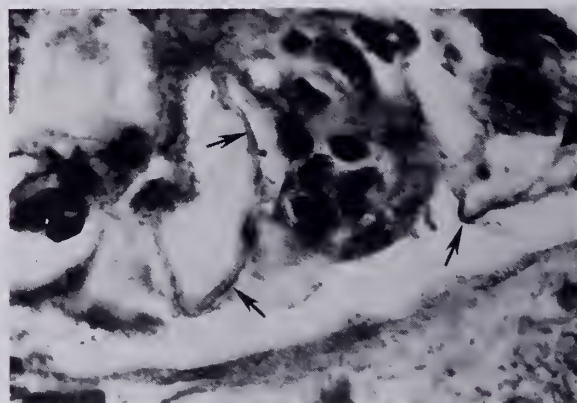


Figure 2. Small segment of a single glomerulus showing some thickening of the glomerular basement membrane (GBM) with granular deposits (see arrows) of immune complexes (IgG and complement identified by fluorescent microscopy) between the GBM and epithelial cell layer (epimembranous) consistent with a mild membranous glomerulopathy. There also is some mesangial hypercellularity seen and, in other sections, margination of polymorphonuclear leukocytes. With the Masson's trichrome stain, the GBM stains light blue-green (light) and immunoglobulin deposits dark purple (dark).



**Table I**  
**FREQUENCY OF CLINICAL AND LABORATORY FINDINGS**  
**IN 28 PATIENTS WITH CHRONIC RENAL VEIN**  
**THROMBOSIS (71)**

| FINDING                                  | NO. OF PATIENTS |
|--|-----------------|
| Edema                                    | 28              |
| Nephrotic syndrome-urine                 |                 |
| protein >3.5/gm/day                      | 27              |
| Greater than 2-fold variation in urinary |                 |
| protein loss in 2 weeks period           | 14*             |
| Extrarenal thromboembolic disease        | 17              |
| Sterile pyuria                           | 27              |
| Hematuria                                | 24              |
| Reduced creatinine clearance             | 28              |
| Renal glycosuria                         | 20              |
| Renal tubular acidosis                   | 16              |
| Asymmetric kidneys                       | 17              |
| Hypertension                             | 19              |
| Flank pain                               | 18              |

\*Only 20 patients had serial urine protein excretions studied.

(3) There is a failure of renal veins to visualize on arteriography and with inferior vena cavagrams,

(4) There are filling defects or failure to visualize the inferior vena cava on venography, and

(5) There may be evidence of pulmonary embolism on chest radiography.

**Renal Biopsy.** Table II lists the renal biopsy findings in chronic RVT. Cade, et al<sup>7</sup> emphasized the variable glomerular pathology, but agreed that a membranous glomerulopathy, with or without proliferative changes, is the most common pathology. Other frequent findings include margination of polymorphonuclear leukocytes in glomerular capillaries, interstitial fibrosis and edema, and fibrin deposition in the venous channels.

**Etiology.** Table III lists the etiological factors which have been associated with the development of renal vein thrombosis. RVT is associated with a variety of renal and peri-renal pathologies. It can result from extension of thrombi from the lower extremities via the inferior vena cava and from local injury to the intima of the renal veins. Thromboembolic disease may result from hypercoagulable states, e.g. nephrotic syndrome, from stasis as seen with congestive heart failure, hypovolemia or dehydration, and in patients with sickle cell disease. Finally, a small percentage of patients develop RVT without recognizable underlying pathology (idiopathic or primary).

#### **Nephrotic Syndrome—cause or consequence of RVT?**

An interesting controversy has been generated by the report by Llach, et al<sup>6</sup> providing strong evidence that RVT is a complication and not a cause of nephrotic syndrome. In a two-year study, they performed inferior vena cavagrams in 36 of 41 consecutive patients biopsied with nephrotic syndrome. Twelve patients (10 with membranous glomerulopathy and 2 with membranoproliferative glomerulonephritis) had evidence of renal vein thrombosis. The other 24 (10 with membranous glomerulopathy, 8 with membranoproliferative glomerulonephritis, 2 with amyloidosis, and 4 with other lesions) had normal renal vein visualization. Only four of these

patients had flank pain to suggest RVT; the other eight were asymptomatic. Subsequently, three of these patients with normal inferior vena cavagrams when the diagnosis was established showed evidence of RVT within three years as documented by followup inferior vena cavagrams.

Other evidence in support of this hypothesis include:

(1) In experimental animals, constriction of one renal vein caused proteinuria only if the contralateral kidney was previously removed. In these animals, no morphological changes resembling membranous glomerulopathy were observed.

(2) In man, different clinical states associated with increased renal venous pressure, e.g. pericarditis, tricuspid insufficiency, and congestive heart failure, may cause proteinuria but these patients do not develop the renal pathology of membranous glomerulopathy. Furthermore, many patients with inferior vena cava thrombosis and/or RVT fail to develop nephrotic syndrome or even proteinuria. Jackson and Thomas<sup>8</sup> reported 24 patients with inferior vena cava thrombosis with 12 having associated RVT. Seven had no proteinuria, two trace amounts of proteinuria, and three had 1+ proteinuria. Deodhar,<sup>9</sup> in another article covering 24 patients with inferior vena cava thrombosis above the renal veins, reported that 7 had some proteinuria but in none was it sufficient to produce a nephrotic syndrome.

(3) Patients with a nephrotic syndrome have a hypercoagulable state (increased fibrinogen, platelets, factors V & VIII, and accelerated thromboplastin generation) and an increased incidence of thromboembolic phenomena. They also have local factors (hypovolemia and decreased renal blood flow) which would favor thrombosis.

(4) Klassen, et al<sup>10</sup> reported a 20% incidence of RVT in the Heymann nephritis model of nephrotic syndrome.

(5) Finally, there are seven cases reports in the literature with unilateral renal vein thrombosis.<sup>5</sup> In four of five cases studied with split renal function tests, the

**Table II**  
**RENAL BIOPSY FINDINGS IN CHRONIC RENAL VEIN**  
**THROMBOSIS—LIGHT MICROSCOPY**

- A. Thickening of basement membranes with subepithelial deposits.
- B. Hypercellularity may or may not be present.
- C. Margination (stasis) of polymorphonuclear leukocytes in glomerular capillaries.
- D. Interstitial edema, fibrosis and inflammation (round cell infiltrate) and tubular damage (vacuolization).

#### **ELECTRON MICROSCOPY**

- A. Irregular deposits between basement membranes and epithelial cells.
- B. Fusion of epithelial cell foot processes.
- C. Interstitial edema, fibrosis and inflammation.
- D. Vacuolization and swelling of endothelial cells.

#### **FLUORESCENCE MICROSCOPY**

- A. Coarsely granular deposits between glomerular basement membrane and epithelial cells of IgG, C<sub>3</sub> component of complement and fibrinogen, less commonly IgM & IgA present.

**Table III**  
**ETIOLOGICAL FACTORS IN DEVELOPMENT OF RENAL**  
**VEIN THROMBOSIS**

1. Association with diseases of renal parenchyma
  - A. Amyloidosis
  - B. Glomerulopathies, especially membranous
  - C. Arteriolar nephrosclerosis
  - D. Diabetic glomerulosclerosis
  - E. Inflammation (pyelonephritis)
2. Perirenal disease
  - A. Perinephric abscess
  - B. Retroperitoneal tumors
  - C. Impingement on vascular pedicle
3. Extension from lower limbs and inferior vena cava
  - A. Post-surgical
  - B. Post-obstetrical
4. Local injury to intima of renal veins
  - A. Trauma
  - B. Surgical intervention
  - C. Invasion by malignancy (hypernephroma)
5. Thromboembolic disease
  - A. Hypercoagulable states (malignancies, e.g. bronchogenic CA, pregnancy, polycythemia vera, post-splenectomy thrombocytosis, nephrotic syndrome and steroid therapy)
  - B. Cardiac conditions (congestive failure)
  - C. Sick cell disease
6. Severe dehydration (especially in infants) and hypovolemia.
7. Idiopathic or primary (?)

proteinuria was as much or greater on the unaffected side as the affected side. Glomerular filtration rate was decreased on the affected side in all three cases where it was studied. Renal biopsy or autopsy showed the same abnormalities on the affected side as on the thrombosed side in four of six cases studied with bilateral membranous glomerulopathy present in all four cases.

**Prognosis.** The prognosis apparently has changed greatly over recent years presumably because of earlier diagnosis and institution of management. Although this might include thrombectomy in acute renal vein thrombosis (sudden onset of flank pain and hematuria), most cases have been treated with anticoagulation with some combination of heparin followed by coumarin over a period of months. In Kowal's 1963 review<sup>4</sup> covering 65 patients, 41 (63%) were dead within two months of

onset, 10 patients were dead within two years of onset, and only 14 were alive with persistent proteinuria at the time of their report. In 1968, Rosenmann, et al<sup>5</sup> reported that 7 of 11 of their patients were dead within one year after onset, but that the other 4 were alive 21 to 150 months after diagnosis. In contrast, Llach, et al<sup>6</sup> reported that 10 patients treated with long term anticoagulation were alive 4 to 24 months after diagnosis with no thromboembolism but had persistence of proteinuria and impaired renal function. Finally, Cade et al<sup>7</sup> similarly reported that only two of these patients had the diagnosis made postmortem. Of the 26 others, all treated with anticoagulation, 22 were alive with stable or improved renal function. The four deaths were due to progressive renal failure in two, and cerebral and retroperitoneal hemorrhage, one each.

ROBERT D. LINDEMAN, M.D.

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Medicine

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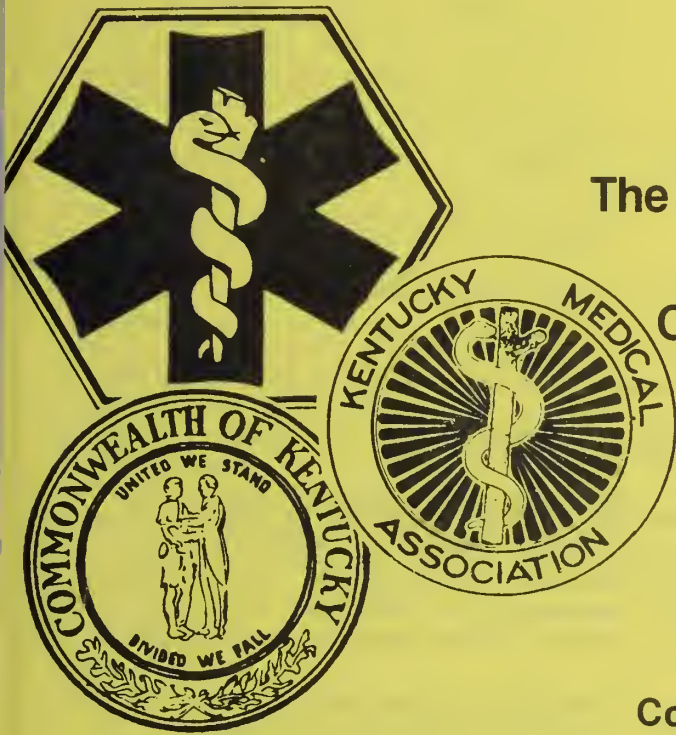
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## SPECIAL ARTICLES

### Alcoholism Today

John L. Norris, M.D.

New London, New Hampshire

MUCH is happening in the field of alcoholism and the pace is accelerating. The literature, both lay and professional, has become too voluminous for any of us to keep abreast of. It is generally accepted that the physical, social, and personality aspects must all be considered in diagnosis and treatment. Alcoholics Anonymous has demonstrated that alcoholic people do get well and stay well. Research in the physiology and biochemistry of alcohol has helped us in the diagnosis and treatment of the complications of alcoholism. Clinical studies by physicians in special fields have shown us the limitations of traditional methods of medical treatment. Studies done by specially trained physicians tell us that up to half of all the patients in our hospitals are there because of alcohol related conditions.

Alcoholism has replaced typhoid, tuberculosis, and syphilis as the great mimic; if you know alcoholism you know medicine, for alcohol, in sufficient amount, will alter the function and/or damage every organ system of the body, including those parts of brain function related to personality.

One of the most comprehensive and practical of the new books is *Alcoholism*, edited by Tarter and Sugarman, published by Addison-Wesley. The *Manual of Psychiatric Therapeutics*, edited by Richard Shader, published by Little-Brown, has a chapter on Treatment of the Alcohol Withdrawal Syndrome which is excellent reading.

That such a simple chemical could be so complex inside the human body, in contact with living tissue, is one of the puzzling and challenging aspects of our subject. One locus of its action is at the cell membrane where it inhibits the active transport mechanism of electrolytes. Through suppression of the activity of the enzyme NaKMgATPase, potassium leaves the cell and

sodium and water enter the cell—hence the wet brain. This effect is not limited to the brain and may explain many of the clinical aspects of excessive alcohol consumption. It emphasizes the importance of careful study of the electrolytes in the clinical management of acute intoxication. Serum potassium may be low and the intracellular potassium is low. Magnesium excretion is elevated even if the reserves in the body are depleted. In spite of an initial diuresis, and thirst caused by the local effect of alcohol in the mouth and throat, many of these patients are over-hydrated. If there has been much vomiting and diarrhea the patient may be dehydrated and need intravenous fluids, but this is less common than over-hydration.

Carbohydrate metabolism often is badly out of balance. If the drinking episode has been long, with little or no food eaten, glycogen stores will be depleted and hypoglycemia may be an immediate cause of discomfort. This explains the tradition among heavy drinkers that another drink, a chocolate bar and/or hard candy helps the hangover. For the longer term—after the acute phase is over—careful study of CHO metabolism should be done, including a five-hour glucose tolerance test. Where the five-hour test has been done, a high percentage of alcoholic patients have shown hypoglycemia which did not appear at two hours. A five-hour glucose tolerance test should be done where problems with alcohol are suspected.

Cardiac irregularity, not uncommon in acute intoxication, may presage ventricular fibrillation, possibly related to intracellular potassium depletion. Autopsies of alcoholic people who die with ventricular fibrillation often show minimal coronary damage.

Physicians have been, and are, too little aware of the hazards of other chemical comforters as we try to help our patients. People who have become dependent on one chemical often become dependent on another. Addiction to more than one drug may result from our assumption that patients will follow instructions. Alcohol has its effect almost immediately. Tablets and capsules act more slowly. When symptoms are not relieved as rapidly as with alcohol, patients are likely to double the dose and not wait the prescribed time. Sedatives and tranquilizers should always be used in a controlled situation where size of dose and frequency of administration is the responsibility of someone other than the patient. This is essential when patients are being followed in the office or out-patient service.

Evidence seems conclusive that most liver cirrhosis is caused by alcohol, although we do not know why

*Dr. John Norris was with the medical department of Eastman Kodak Company in Rochester, N.Y. from 1937 until his retirement in 1969. He has worked in the field of alcoholism in the United States for over 30 years, having started one of the first programs to rehabilitate alcoholics in industry.*

*A non-alcoholic, he has given generously of his time to the field of alcoholism and served for many years as Chairman of the Board of Trustees of Alcoholics Anonymous.*



some heavy drinkers do not develop serious liver damage, and not all people who develop cirrhosis are heavy drinkers.

Pancreatitis is now thought to be the direct result of excessive alcohol consumption, not always related to liver damage.

Hypertension in heavy drinkers is often relieved by total abstinence.

Blood dyscrasias are not uncommon. Leukopenia occurring during a binge may be the reason why classical lobar pneumonia is an occasional complication. The last two cases of typical pneumonia that I have seen followed a binge. Both developed DT's.

Korsakoff's Syndrome and peripheral neuritis, probably nutritional in origin, are common organic effects of excessive alcohol consumption over the long term.

An aspect which is just beginning to appear in the literature is the duration of cloudy thinking after alcohol is out of the body. I became aware of this years ago, when an unusually intelligent young man told me one month after he had stopped all alcohol, "It has been only in the last three days that I have been able to think the way I used to." I have asked many recovering alcoholics how long it took after they stopped drinking for their thinking to clear and the answers have ranged from a month to seven years. This may partially explain why these people seem so unreasonable to us, and why continued contact with a therapist and/or AA is important.

Can people who have been in serious difficulty with alcohol drink again? Safely? The overwhelming majority who have tried have failed. The usual story is that, after a period of abstinence, they return to moderate, social, drinking and for a time seem to be able to control the amount. They think they "have it made." Soon they are back in trouble and on our doorstep. During the months after the publication of the Rand Report, many patients of treatment centers, who had been abstinent and doing well, returned to the center acutely intoxicated. We do not know how to separate the very few who can safely return to drinking from the majority who cannot. Until we know that, our advice must be permanent, total abstinence.

Very recently, studies have been reported which show that the incidence of developmental anomalies and mental retardation is significantly increased in babies born to mothers who have been drinking heavily during pregnancy. So far as I know, the amount of alcohol it takes to accomplish this has not been determined, but moderation during pregnancy is definitely indicated.

We used to think that "alcoholics must want help before anything can be done for them." Most people still think so, but in recent years programs in industry have developed methods for stimulating the desire to recover. Still, it is usual that people in serious difficulty with alcohol, including medical complications, will leave the hospital and treatment with a carefully planned regimen described in detail, only to return after days or weeks, again in serious trouble.

What is wrong? Why don't they follow a planned program and do what we prescribe? Physicians assume that patients will accept their advice. They come to us sick and uncomfortable. We help them to feel better. They leave active treatment feeling much better physically. We have told them that in our opinion their use of and dependence on alcohol and/or other drugs has

caused their physical and emotional or spiritual pain and that to stay well they must control or eliminate their use of these medications. Why don't they accept our diagnosis and advice? Other patients usually follow a prescribed treatment and stay out of serious trouble once they have recovered from acute difficulty. Why are alcoholics and other addicts different?

Five factors work against success: (1) Failure of the patient to accept at depth that alcohol (or other drug) is the problem. Alcohol has provided comfort in many stressful situations. Even though the comfort was brief it was quick, and at first there were no serious problems. As problems develop during or after drinking episodes it is easy to blame something else. Rarely does anyone who is dependent on alcohol or other mood-changing drug face the reality of the situation and eliminate the use of the drug on his own. Discomfort from stressful situations returns and with it the desire for the quick relief. Unless these patients, or the hostile situations in which they may be living, change they will almost certainly return to the drug which has given them comfort. (2) Denial is part of the disease, and is supported by a system of rationalizations and alibis which have been rehearsed so much that the patient almost believes them. They are convincing, and unless we know that the stories do not fit the facts we believe them. One employer used to tell me, "Unless you have the facts so firmly documented that you can't be persuaded otherwise, these people will have you apologizing for misjudging them." (3) Rejection of themselves as worthy of consideration or respect, due to their loss of control; their feelings of guilt, self-pity, anger, the whole gamut of uncomfortable feelings all increase their need for the relief which drugs have supplied. (4) Rejection and hostility at home and at work. To society, especially the helping professions, these people have been the rejects, the social lepers. Our experience with them seems to justify it. They are undependable, they manipulate us, they seem to find it easier to "fib" than tell the truth. They break promises sincerely made. They don't support their families adequately. They are a hazard on the highway. The list of things we don't like seems endless, and to top it they don't follow our recommendations. So we push them further into the welter of destructive feelings from which they have learned to escape with the drug. (5) We, who want to help our patients be more comfortable, have in the past turned to other chemical comforters which often compounded the problem. Becoming impatient with the half-hour or so that most tablets and capsules require for effect, many of these patients will double the dose and/or decrease the interval between doses. Thus the dual addiction may develop.

What can be done? Referral to AA or to a hospital program which can prepare the patient for an alcohol/drug free life are two possibilities. A good hospital program will:

- a. reduce as far as possible any physical distress.
- b. inform the patient about alcohol and other drugs by means of lectures, discussion, literature and films. The goal at this stage is to show the patient that addiction is his/her problem.
- c. utilize and interpret the AA program. Staff should know the AA literature. I have on occasion read aloud

to a patient a pertinent paragraph or chapter of the book, *Alcoholics Anonymous*. In some hospitals AA members serve as volunteers in the emergency room and the wards to help "talk a patient down" during withdrawal. Often this reduces the need for chemical sedation.

d. provide individual and group therapy sessions.

e. invite AA to provide AA meetings in the institution.

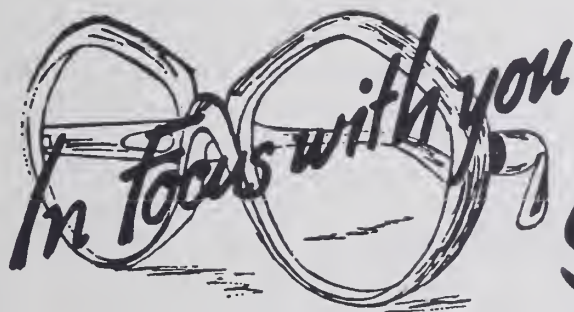
f. encourage contact with AA members who may introduce the patient into an AA group when he leaves the hospital.

The treatment goal, then, is to persuade-convince the patient that he has the disease of alcoholism—or other addiction, that he can never use the drug again safely, that his physical, social, and spiritual problems are part of the disease, and that the disease is treatable. He can become a worthwhile person again, and his life can be full and satisfying.

But we must go one step further. The family must be prepared for the return of the patient. It is important to provide counseling for the family so that they may better understand the disease and the destructive nature of their own response to it. The frustration, hurt, resentment, fear, shame, and anger of spouses and children create tensions which the patient has been unable to face with-

out drugs. Al-Anon, the companion group to AA, has provided effective help for many thousands of women and men. Its program is almost identical to that of AA. In some hospitals Al-Anon members serve as volunteers counseling spouses during the hospital stay of the patient. Professional psychiatric help may also be necessary, but here, as in alcoholism, long term support may be provided by the Al-Anon group. Membership in Al-Anon by the spouse often precedes acceptance of AA by the drinker. At Lutheran General Hospital they have used "bridge groups," where staff members would meet with several of the important people in their patient's lives, describing and discussing the disease.

Stressful situations are part of life. Patterns of meeting them will probably not be changed by a brief period of therapy. Support will be necessary for months, or years. Professional treatment for the rest of life is not feasible and only occasionally necessary. For almost everyone it is prohibitively expensive. AA and Al-Anon are available. They are effective in a high percentage of cases and within the means of everyone. Introduction to these organizations can best be made during active treatment. Recovery of those we once considered hopeless to a quality of life and happiness that is most attractive is the sort of recovery we crave for all our patients, but rarely achieve on our own.



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Ambulatory Surgery, "short stay surgery," "in-and-out," "outpatient surgery," or "day surgery," as defined in *Surgery*, consists of procedures "of an uncomplicated nature which traditionally have been done on an inpatient basis, but which can be done with equal efficiency without hospital admission."

The essence of outpatient surgery is that quality of care remains uncompromised by abandoning the traditional period of brief hospitalization with its inherent costs. The *Archives of Surgery* estimates that 20% to 40% of surgical procedures currently performed in the hospital could be done on an outpatient basis.

In Kentucky since 1972, the growth of ambulatory care has been unprecedented, although as a state we are behind other regions in the nation. In metropolitan areas such as Louisville, the number of outpatient surgical procedures has increased 150% to 200% during the past five years. Statewide the increase is a more modest 38% since 1973.

Nationwide, there are over 230 centers dedicated exclusively to ambulatory care and their number is expected to increase by 50% in the next five years. The numbers of hospitals which have created sections and special procedures for in-and-out surgery cannot be determined. In 1975 certain centers in the Northeastern United States were responsible for 7-10 outpatient operations per 1000 population base while at the same time 86 inpatient operations (excluding obstetrical) were performed. This rate of outpatient surgery could reasonably be expected to grow to 20-25 outpatient cases/1000 people which in Kentucky would represent 100,000 or more outpatient procedures per year.

The primary stimulus to the development of outpatient surgery has not been the practicing surgeon but rather small groups of physicians and administrators who have seen the potential of this field. There are multiple factors contributing to this extraordinary increase of ambulatory care, factors which will grow in influence and assure continuing expansion of ambulatory services.

Federal regulations with control of hospitals and medical facilities have made it impossible to increase revenues by simple expansion and creation of additional beds. Since surgical procedures, attendant care, and ancillary needs usually generate the preponderance of institutional revenues, it was natural that alert administrators and hospital based physicians should turn to this area as one of increased potential income and improved services. The success of "attached" and "free standing" surgical outpatient centers, while preserving patient-oriented, quality care, attests to the foresight of those individuals' pioneering efforts. Expansion has occurred in this field which is yet unencumbered with the same degree of control imposed on hospitals by the Federal Government and other regulatory agencies.

Growth of outpatient surgery could not have occurred without physician acceptance and participation. Once established, surgeons have not proven reluctant to utilize outpatient facilities. The reasons are simple—quality of care

(Continued on next page)

and surgical income are maintained with less time and inconvenience. Lengthy history and physical examinations, rounds, orders, and discharge summaries are reduced to a minimum.

Growing acceptance by patients has influenced the success of ambulatory care. Surveys have found 90% or more of patients pleased with the experience and 95% preferring it to overnight hospitalization. There is little doubt that convalescence at home is less traumatic to pediatric patients. Good surgical practice is consistent with outpatient breast biopsies and the patient's anxiety about the procedure, i.e. awakening with a mastectomy even with assurances that the lesion is benign, is reduced immeasurably.

Finally, third party carriers have begun to realize the savings possible with outpatient surgery. Costs for the same procedure can be as much as 40% to 60% less when performed on an ambulatory basis. The third party carriers' reluctance to accept outpatient coverage had an early detrimental influence on development; however, their interest is reflected today by the fact that seven million federal employees have ambulatory surgery benefits.

The Federal Government will be a stimulus to continued growth of outpatient care. The *Southern Medical Journal* reported in 1978 that "With national health insurance . . . One of the first effects noted would be a tremendous increase in the demand for smaller surgical procedures. This happened in Britain, when they introduced their National Health Plan . . . much of the anticipated pressure will be relieved by ambulatory surgical facilities."

While growth in outpatient surgery has occurred and its future seems assured, special needs have arisen which have not been addressed. There is no source at present: the Department of Health, Education and Welfare, the American Medical Association, the College of Surgeons, etc. . . ., with any reasonable estimates of the volume of morbidity of surgery being performed on an outpatient basis. National data must be extrapolated from isolated reports and there is no consistent information on ambulatory care enabling physicians to direct attention to problem areas such as wound management.

Malpractice in outpatient surgery is another area requiring investigation. Patient risk is, to an extent, related to the time of exposure to the health delivery system. It is reasonable to expect that outpatient surgery with its limited exposure to medications, orders, and ancillary personnel would be accompanied by less risk of litigation.

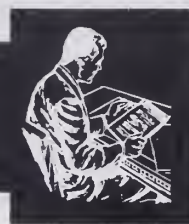
There is only a small amount of literature in the field of outpatient surgery and evolution of national organizations dedicated to improved ambulatory care is occurring. Another neglected area is that of product needs reflecting the special requirements of ambulatory care.

In Kentucky, the exact number of outpatient surgical procedures has not been determined; however, the rate is increasing dramatically. Tremendous room for growth remains while preserving quality of care and reducing costs to the people of Kentucky. Ambulatory care also has the potential for expanding services at a nominal cost to medically underserved portions of the state. Continuing and expanded physician input is desirable and each of us should assess our practice and its relation to this worthwhile expanding medical concept.

J.P.M.



# MATERNAL MORTALITY



## From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

**A** SINGLE, 23-year-old, white, gravida 1, para 0, had an uncomplicated prenatal course. She was admitted at 5:15 AM on 12/2/75. The patient had a normal sterile delivery without complications. Both mother and infant left the delivery room area in satisfactory condition. (Lab results: Hemoglobin and Hematocrit were 12.4 and 36.1.)

Mother received routine post-partum care and did well; she had ambulated. Her uterus was firm. Lochia was scant, and the patient was afebrile. On the morning of 12/5/75 the patient was afebrile but had a foul-smelling lochia. Her uterus was firm. Her abdomen was slightly tender, and her episiotomy was negative. Culture and sensitivity of the lochia was obtained. The patient was to be started on IV fluids, given Ampicillin 500 mg. IV for six hours and aspirin as needed for pain and temperature, if they occurred. However, as the patient was getting ready to take a shower, she stood up beside her bed and then fell back into bed. A code 300 was called. There were several staff doctors who answered the code. Subsequent cardio-resuscitative measures were instituted, including eventually placing the patient on a pacemaker. All efforts failed. The patient was pronounced dead at 10:00 a.m.

Cause of death was listed as cardiogenic shock, secondary to pulmonary embolism.

### Discussion

Thrombocardiac decrease is the leading nonobstetrical cause of postpartum death. Pulmonary embolism is second only to abortion as a cause of maternal mortality.<sup>1</sup> Early recognition and proper treatment can dramatically improve the outcome.

**Incidence.** The incidence is between 0.1% and 1% in postpartum patients. Puerperal patients outnumber antepartum patients three to one. Deep Vein Thrombosis increases in frequency as the pregnancy progresses.<sup>2,3</sup> Fifty-five percent occur within the first three days of delivery, but it may occur as late as six weeks postpartum. Antenatal patients with untreated deep vein thrombosis will have incidence of 24% pulmonary embolism with a mortality of 15%. Patients with treated deep vein thrombosis will decrease the incidence of pulmonary embolism to 4.5% with a mortality rate of 1%.

**Etiology.** In the third trimester the velocity of venous flow return is decreased by one half. The pregnant uterus acts as an impediment to venous return. Fibrinogen, Factor VII and other vitamin K dependent clotting factors are increased during pregnancy. In patients with

pulmonary embolism, 39% are associated with infection, 36% with heart disease, 32% with obesity, and 17% trauma to lower extremities (stirrups on delivery tables). As maternal age increases the incidence of pulmonary embolism increases.

**Diagnosis.** Early diagnosis and aggressive treatment will save most patients. The hallmark of pulmonary embolism is dyspnea. The onset may be very subtle and insidious with gradual worsening, or it may be catastrophic. The patient may have simple tachypnea or it may be associated with sudden SOB, hemoptysis, and chest pain. Small embolism may lodge in the lung periphery, produce infarction and cause pleural signs like cough, hemoptysis, pleuritic chest pain and a friction rub. A massive pulmonary embolism may suggest a myocardial infarction, including hypotension, syncope, convulsions and pulmonary edema.

Physical examination may reveal only the tachycardia and few rales. The diagnosis may be quite difficult on physical exam only. However, massive pulmonary embolism will produce the classic signs of right-sided heart failure with jugular venous distension, and enlarged liver and split  $P_2$  sound. The EKG will show tachycardia, nonspecific T-wave inversion, right axis shift, and right heart strain. A  $P_{O_2}$  of less than 80 is always found. The ventilation perfusion scan is most helpful in early diagnosis. X-ray changes are late and not helpful unless the embolism is massive. Pulmonary angiography is indicated if surgery is contemplated.

Fibrin split products are always present and can be found even in uncomplicated cases. Hence, the absence of fibrin split products virtually excludes the diagnosis of embolism. A  $P_{O_2}$  of greater than 80 hg with the patient on room air also makes the diagnosis unlikely.

The diagnosis of deep vein thrombosis clinically is very difficult. The normal physiologic changes of pregnancy mimic deep vein thrombosis. No sign or symptom is specific. To diagnose deep vein thrombosis accurately, invasive techniques like venograms must be used.

Septic pelvic thrombophlebitis frequently is the predisposing factor in pulmonary embolism. Unfortunately, this diagnosis is not thought of until embolization to the lungs occur. The diagnosis is made primarily on the basis of the patient's failure to respond in 48 to 72 hours of adequate antibiotic coverage.

**Management.** If the patient is hypoxic, increase oxygen to prevent cardiac arrhythmia and loss of cardiac output. Anticoagulate with 30,000 IU of heparin given IV



bolus and 2,000 IV every hour with pump, then get necessary scans and x-rays. Heparin therapy is monitored by using the partial thromboplastin time or the thrombin clotting time.

If pulmonary embolism occurs while on good anti-coagulant therapy, surgery should be considered. Pulmonary embolectomy may be life saving, but should be considered only in those patients with (angiographically) demonstrated massive embolization to the main pulmonary artery with persistent inadequate cardiac output despite appropriate measures. In these cases, survival is of primary concern. The inferior vena cava is ligated and transvenous retrieval of the clot can be done by using either suction or basket technique. If circulation can be established in one-half to one-third of the lung the patient will probably survive.

**Isopoterenal** (Isoprel) by drip (2-4 mg per 500 ml of D<sub>5</sub>W) is the preferred agent for hypotension. Monitor fluid intake closely, perhaps by a central venous pressure line. **Amniophyline** decreases reflex broncho spasm and has a diuretic action which is helpful if pulmonary edema is present. If patient is in pulmonary edema, digitization may be necessary. **Morphine** or **meperidine** can be used for pain. Stool softeners are used to avoid straining at stool. Bed rest is necessary for 5-7 days.

### Instructions for Nurses and Patients

Prophylaxis by early ambulation and passive exercises of lower extremities while in bed are important in promoting circulation of the pelvis and extremities. Elevating the foot of the bed with the patient's head down allows gravity to work for the patient. Support hose are of questionable value in prophylaxis. Pneumatic boots put on at surgery are not always available at all hospitals.

"Mini doses" of heparin should be used prophylactically in labor and delivery patients who have had (a) previous pulmonary embolism, (b) history of thrombophlebitis, (c) high risk patients for phlebitis such as patients with varicosities undergoing cesarean section, and (d) massively obese patients.

### Summary

1. Routine preventive measures against pulmonary embolism should be instituted in all postpartum and other high risk patients.
2. Early recognition and proper aggressive treatment can dramatically improve the outcome.
3. Recognition of predisposing conditions is paramount in early diagnosis.
4. A normal PO<sub>2</sub> and absence of fibrin split products rule out the diagnosis of pulmonary embolism.
5. Oxygen, heparin, and isoprel are the cornerstones of treatment.
6. Surgical intervention is necessary when medical treatment is unsuccessful.
7. A good obstetrician is always alert to this ever impending catastrophe.

CHARLES OBERST, M.D.  
Louisville, Kentucky

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2. Alger LS, Larson RK: Thromboembolic Disease and Pregnancy. *J-Con Ed in Obstet Gynecol* August 13, 1978.
3. Aaro LA, Juergens JL: Thrombophlebitis Associated with Pregnancy, *Am J Obstet Gynecol* 109:1128, 1971

**Tenuate**®  
(diethylpropion hydrochloride NF)

**Tenuate Dospan**®  
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

#### Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdose. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSSAGE:** Manifestations of acute overdose include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdose.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.  
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:

MERRELL-NATIONAL LABORATORIES  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

**Merrell**

**Whether overweight is a  
complicating factor...  
or just uncomplicated overweight.**

# **Tenuate® Dospan®<sup>IV</sup>** **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

## **A useful short-term adjunct in an indicated weight loss program.**

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

## **In uncomplicated obesity.**

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

## **Clinical effectiveness.**

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.<sup>1</sup> And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."<sup>2</sup> Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.  
And it's responsible medicine.**

# **Merrell**



For prescribing information see opposite page





## The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis\* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

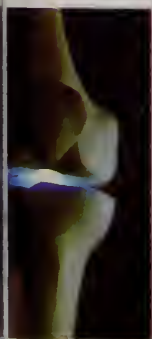
The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions.

However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

\*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).





# Motrin<sup>400</sup>mg<sup>TABLETS</sup> ibuprofen, Upjohn

The confidence that comes from experience—  
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

**Upjohn**

The Upjohn Company, Kalamazoo, Michigan 49001

The confidence that comes from experience—  
one more reason to prescribe

# Motrin<sup>®</sup> 400 mg TABLETS

ibuprofen, Upjohn

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** Aspirin used concomitantly may decrease Motrin blood levels. Coumarin. Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

## Adverse Reactions

### Incidence greater than 1%

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea<sup>®</sup>, epigastric pain<sup>®</sup>, heartburn<sup>®</sup>, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness<sup>®</sup>, headache, nervousness. **Dermatologic:** Rash<sup>®</sup> (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; \*3% to 9%.

### Incidence less than 1 in 100

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

### Causal relationship unknown

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

## How Supplied

### Motrin Tablets, 300 mg (white)

Bottles of 60

Bottles of 500

NDC 0009-0733-01

NDC 0009-0733-02

### Motrin Tablets, 400 mg (orange)

Bottles of 60

Bottles of 500

Unit-dose package of 100

Unit of Use bottles of 120

NDC 0009-0750-01

NDC 0009-0750-02

NDC 0009-0750-06

NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.



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NIM-3



# Accept no substitute for your professional judgment

As a physician, you have the right to prescribe the drug which you believe will most benefit your patients. Now, substitution laws make it more difficult to exercise that right. In many states, unless you specifically direct pharmacists to dispense your brand-name prescription as written, they may be required by law to substitute another drug for your brand-name prescription.

This means that the ultimate drug selection is no longer yours; its source is left to the pharmacist's discretion. You will have forfeited your right to prescribe as you see fit. Preserve your rights. Specify that you will accept no substitution.

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- You choose the quality of the product dispensed to your patient
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- You can support the kinds of research programs that are vital to new drug discovery and development
- You can help sustain important physician, pharmacist and patient education services supported by innovative, research-oriented firms

For complete information on the drug substitution law effective in your state, please consult your local Pfizer Representative.



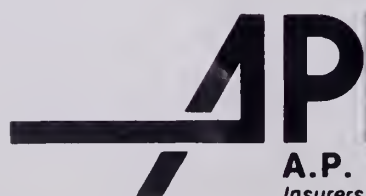
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Comparing one disability income contract to another can be about the same as comparing apples to oranges. Rate alone doesn't mean much.

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- Line buttons that pop up automatically when you hang up to minimize the chance of someone inadvertently picking up during your conversation.
- Your choice of console faceplates, in colors or woodgrain, to complement office decor.

Optional features include:

- A ringing feature that keeps your phones working even if outside power fails.
- Paging systems that can broadcast messages to an entire office area or to specific departments. Or carry background music. (That same music can be piped into the system's "hold" function, for waiting callers.)
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## BRIEF SUMMARY OF PRESCRIBING INFORMATION

### ANTIMINTH® (pyrantel pamoate) ORAL SUSPENSION

**Actions.** Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

**Indications.** For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

**Warnings.** *Usage in Pregnancy:* Reproductive studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

**Precautions:** Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

**Adverse Reactions.** The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

**Dosage and Administration.** *Children and Adults:* Antiminth Oral Suspension (50 mg pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 kg of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purgation is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juice.

**How Supplied.** Antiminth Oral Suspension is available as a pleasant tasting caramel flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

More detailed professional information is available on request.

**ROERIG** 

A division of Pfizer Pharmaceuticals  
New York, New York 10017





**When you're good  
people recognize you.**

Highly effective  
single-dose convenience

Non-staining

Economical

Pleasant tasting

**Antiminth<sup>®</sup>**  
**(pyrantel pamoate)**

equivalent to 50 mg pyrantel/ml  
ORAL SUSPENSION



a drug of choice in  
pinworm infections

For more information, please see brief summary of prescribing information on facing page.

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A reminder

# ZYLOPRIM<sup>®</sup>

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

**INDICATIONS AND USE:** This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim<sup>®</sup> (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

**In patients receiving Purinethol<sup>®</sup> (mercaptopurine) or Imuran<sup>®</sup> (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.**

**Usage in Pregnancy and Women of Childbearing Age:** Zyloprim<sup>®</sup> (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

#### ADVERSE REACTIONS:

**Dermatologic:** Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported. Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported. A few cases of alopecia with and without accompanying dermatitis have been reported. In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

**Gastrointestinal:** Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

**Vascular:** There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angitis which have led to irreversible hepatotoxicity and death.

**Hematopoietic:** Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

**Neurologic:** There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

**Ophthalmic:** There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. To date, cataracts were reported in one patient who received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yu for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

**Drug Idiosyncrasy:** Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. It was characterized by fever, chills, leukopenia or leucocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

**OVERDOSAGE:** Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

**HOW SUPPLIED:** 100 mg (white) scored tablets in bottles of 100 and 1000; 300 mg (peach) scored tablets in bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local E. C. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Pat.)



**Burroughs Wellcome Co.**  
Research Triangle Park  
North Carolina 27709

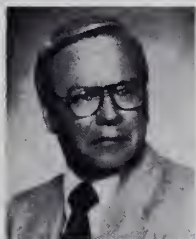


## ASSOCIATIONAL NEWS



### Robert G. Cox Is Chosen PCMA President-Elect

Robert G. Cox, executive vice president of the Kentucky Medical Association, was recently selected President-Elect of the Professional Convention Management Association (PCMA). The election took place in San Francisco at the Association's 22nd Annual Convention. Mr. Cox will be installed as President in Kansas City on January 18, 1980.



PCMA is an Association representing 230 member organizations which collectively generate more than one billion dollars in convention business annually. Its members are individuals who manage conventions and/or meetings in the fields of medicine, medical sciences, and allied health professions.

Mr. Cox also serves on the Boards of Directors of the American Association of Medical Society Executives, the Rural Kentucky Medical Scholarship Fund, Blue Cross and Blue Shield of Kentucky, the Kentucky Medical Insurance Company, and is a member of the Advisory Committee to the American Medical Association Executive Vice President.

### Early Registration Urged For Practice Management Workshops

Due to limited enrollment, early registration is urged for those interested in two workshops cosponsored by the KMA and the AMA Department of Practice Management, scheduled for April 24-26 at the Ramada Inn, Hurstbourne Lane, Louisville.

"Starting Your Practice," a two-day program designed for young physicians planning to enter private practice and those who have been in practice less than one year, will be held on April 24-25. A varied program will feature informal presentations of useful information about the business procedures and practical problems of establishing a practice. Subjects include paperwork, patient management and public relations, personnel, physical characteristics of a medical office, and legal problems. The registration fee is \$100 for members of the Federation and \$130 for non-members. This fee includes books, lunches and a comprehensive office management manual.

Another workshop, "Team Building—A Better Way to Supervise," is scheduled for April 26, and is provided for physicians' office managers. Topics to be discussed at the one-day meeting include employee hiring, motiva-

tion, job performance appraisal, and other office procedural techniques. Physicians are encouraged to register their office managers as soon as possible since past experience shows that the enrollment is filled rapidly. The fee for this workshop is \$35.

### 8th Annual Sports Symposium Set for April 2-3

"Fieldside Recognition and Treatment of Sports-Related Injuries" is the theme of the Eighth Annual Medical Aspects of Sports Symposium to be held April 2-3 at the Hyatt Regency Hotel in Lexington.

Guests who will participate in the program include Renner M. Johnston, M.D., Director of the Division of Orthopedics at the Denver General Hospital, Colorado; Aaron Mattes, Ph.D., Assistant Director of Kinesiotherapy, Department of Physical Education, Toledo University, Ohio; and Lee Rose, head basketball coach at Purdue University, Indiana.

The purpose of the symposium is to explore methods of recognizing and managing sports-related injuries, discuss ways to prevent sports injuries, increase awareness of problems peculiar to women athletes, and afford separate workshops for physicians and coaches/trainers in "fieldside" techniques.

The symposium meets the criteria for 14 credit hours in Category I of the KMA Physician's Recognition Award. It is also acceptable for 14 hours prescribed credit from the American Academy of Family Physicians and/or 1.4 c.e.u. credits.

Registration (\$65 for physicians) may be made by contacting Ms. Joy Greene, Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40536.

### Emergency Medical Care Meeting Scheduled for June 6-7

The 9th Annual KMA Emergency Medical Care Seminar and the 4th Annual Commonwealth of Kentucky Emergency Medical Services Conference will be held jointly on June 6 and 7, 1979 at the Hyatt Regency, Louisville.

Speakers will discuss topics around the themes of "Cardiac Arrest and Arrhythmias," "Cranial Cerebral Emergencies," and "Respiratory Problems."

The Red Cross will again hold workshops in cardiopulmonary resuscitation (CPR), and there will be special interest groups meeting. Registration for the total program is \$15 per day.



CME credit will be applied for from the AMA, the Kentucky Academy of Family Physicians, the American Academy of Emergency Physicians, the Emergency Department Nurses Association, and the American Registry for Emergency Medical Technicians.

## **Physician Recruitment Fair Date and Site Changed**

Because of scheduling conflicts, the date and site of the KMA Physician Recruitment Fair have been changed. The one-day meeting is now set for October 20, at the Ramada Inn/Bluegrass Convention Center, Louisville.

Divided into two sessions, the fair will feature a morning orientation session to instruct representatives from hospitals and communities seeking to recruit physicians, and the afternoon session when they will have the opportunity to meet with resident physicians and senior medical students from Kentucky's two medical schools.

Additional information will be sent to KMA members and others as details for the Fair are arranged. For more information, please contact the KMA office.

## **RKMSF Accepting Applications For Scholarship Loans**

The Rural Kentucky Medical Scholarship Fund (RKMSF) is now accepting applications from medical students who are residents of Kentucky and have been admitted to one of Kentucky's medical schools, according to G. L. Simpson, M.D., Chairman of the Fund's Board of Trustees.

The Fund, created in 1946 as a means of providing a better distribution of physicians in the rural areas of Kentucky, now has 210 physicians in practice in 85 counties, with 35 serving in designated critical counties. Since its beginning, the Fund has loaned over \$1-1/2 million.

A freshman student may now borrow up to \$4,000 (a \$500 increase since 1977) provided he will agree to practice in any of over 100 rural counties of the Commonwealth.

The Board of Trustees approved a total of 55 new and renewal loans for the 1978-1979 school year, for a total loan amount of \$220,000.

Doctor Simpson, in noting the success of the program in the past 31 years, expressed particular appreciation for the support of Governor Julian M. Carroll, the Department for Human Resources, and the members of the Kentucky General Assembly.

## **Automotive Medicine Meeting**

The 23rd Annual Scientific Meeting of the American Association for Automotive Medicine will be held on October 4-6, 1979 at the Hyatt Regency Hotel in Louisville. The meeting is open to all interested physicians concerned with automotive trauma and medical aspects of driving.

## **1979 KMA Annual Meeting To Be Held Sept. 24—27 at Ramada Inn/Bluegrass Convention Center**

The 1979 Annual Meeting of the Kentucky Medical Association will be held September 24-27 at the Ramada Inn/Bluegrass Convention Center in Louisville.

Themes for the meeting are: "Trauma," "The World of Cancer," "The Biliary Tree," and "Recent Advances in Medical Practice."

Future issues of *The Journal* will feature biographical information on the program participants, schedules for specialty meetings and auxiliary activities.

Make your plans now to attend the 129th Annual Meeting of KMA.

## **KMA Awards Nominations Now Being Accepted**

Fred C. Rainey, M.D., Elizabethtown, Chairman of the KMA Awards Committee, announces that the Committee is now accepting nominations for the Kentucky Medical Association Award and the Distinguished Service Award.

The KMA Award is to honor an outstanding layman and the Distinguished Service Award honors the outstanding physician of the year. The awards are traditionally presented at the President's Luncheon during the KMA Annual Meeting in September.

Nominations should be forwarded to the KMA Headquarters Office and marked: "Attention: Awards Committee."

## **Scientific Exhibits Deadline**

Physicians interested in presenting a scientific exhibit at the 1979 KMA Annual Meeting are urged to make their plans soon, according to Richard A. Kielar, M.D., Chairman of the KMA Scientific Exhibits Committee.

Applications for space should be received by July 1, 1979, at the KMA Headquarters Office. Scientific exhibits are supported and welcomed as part of continuing postgraduate education and credit may be obtained from the Kentucky Academy of Family Physicians and the AMA.

An application was printed in the February, 1979 issue of *The Journal* on page 97. An application will appear in subsequent issues of *The Journal* and also may be obtained from the KMA Headquarters Office.

## **AMA WORKSHOP**

"Physicians and Chronic Mental Patients: Potentials for Community Based Care," is the theme of a workshop scheduled by the American Medical Association for May 10-11 at the Palmer House in Chicago. For further information, contact Mrs. Janice Robertson, AMA, 535 N. Dearborn St., Chicago, Ill., 60610.

## COMBINED MEETING

The Kentucky OB-GYN Society, Kentucky Section of the American College of Obstetricians and Gynecologists and the Kentucky Section of the Nurses Association of the American College of Obstetricians and Gynecologists will hold a combined meeting, June 1-2, 1979, at the Hyatt Regency Hotel, Lexington, Kentucky. Their subject will be: Advances in Infertility and Obstetrics. Please address inquiries to Glenn Moore, M.D., 1800 South Limestone, Lexington, Kentucky 40502.

## 17TH ANNUAL AAMA KY. SOCIETY CONVENTION

"Challenge and Opportunity" is the theme of the 17th Annual American Association of Medical Assistants Society of Kentucky Convention. The meeting, to be held April 27-29 at the Draw Bridge Motor Inn, Ft. Mitchell, Kentucky will be addressed by Hoyt Gardner, M.D., President-Elect of the AMA. For registration information, contact Ada Spann, 4740 Exall Lane, Paducah, Kentucky 42001, (502) 443-6375 or 442-7181.



## Members in the news

### HONORS BESTOWED

**Arthur H. Keeney, M.D.**, professor of ophthalmology and dean of the University of Louisville School of Medicine, was the principal speaker for the annual meeting of the Florida Society for the Prevention of Blindness on February 3 in Tampa.

**William K. Keller, M.D.**, Louisville, has contributed two chapters to *Ann Lander's Encyclopedia from A to Z*. Doctor Keller, a retired psychiatrist, has been a consultant to the Ann Landers syndicated advice column for several years.

**Danielle M. Turns, M.D.**, is serving as the first Kentucky state director to the American Medical Women's Association. Doctor Turns, a psychiatrist in Louisville, is a graduate of the University of Lyon in France.

**George R. Nichols, II, M.D.**, head of the division of Forensic Pathology at the University of Louisville School of Medicine, was a featured speaker February 14 at the annual meeting of the American Academy of Forensic Sciences in Atlanta, Georgia. Doctor Nichols is a former member of the Board of Governors of Louisville General Hospital. He received both his B.A. and M.D. from the University of Louisville.

## KMA ANNUAL MEETING

September 24-27, 1979

Ramada Inn/Bluegrass  
Convention Center  
Louisville, Kentucky



## Trustees' Report

### TENTH TRUSTEE DISTRICT

**Richard F. Hench, M.D., Lexington**

Over the last several years efforts have been made to find a more suitable and permanent home for the



Fayette County Medical Society. Recently the Board of Health Building on Waller Avenue became available when the Health Department moved to the new Glenn Dorroh Building on Newton Pike. (This new building is a fine tribute to one of our most distinguished members.)

The original plan was for the FCMS to buy the building and then rent unneeded space, chiefly to the Central Kentucky Blood Center. Primarily because the Blood Center is a nonprofit organization and the County Society is not, it was more feasible for the Blood Center to buy the building and rent to the Medical Society. This has been accomplished, and the move into the new quarters is now in progress.

Each year the Lexington Chamber of Commerce awards four Community Cornerstone awards for outstanding contributions in Arts, Business and Profession, Community Service, and Government Service. This year, two of these awards were given to physicians. Franklin Moosnick, M.D. was given the Business and Professional award for his work in cardio-pulmonary resuscitation instructions through the Rotary Club, the schools, and general public of Lexington. James Holloway, M.D. was given the Community Service award for his work in the great World Three-Day Equestrian Events held at the Horse Park in September 1978. Congratulations to Franklin and Jim from the medical community.

Peter Bosomworth, M.D., Vice President of UK Medical Center is the President-elect of FCMS.

FCMS is now in the process of changing its bylaws to encourage medical students at UK to join the Kentucky Medical Association. This effort was initiated by KMA when it suggested that State and County dues be waived for students during their four years in medical school. Hopefully, this will encourage early and active participation in organized medicine.

## COST CUT CORNER

### MARCH—Critique Your Practice Patterns

All of us tend to get in a rut. From time to time review your practice patterns. How you schedule your time, your method of ordering admissions, diagnostic tests, lengths of stay, prescription writing and so on. Remember, although the professional component of a patient's cost may be only 19%, as purchasers of the patient's care we influence the spending of 40% to 60% of the remainder of his health care dollar.

If every Kentucky physician would effect a savings of \$10 a day, through more efficient practice, Kentucky citizens would save \$14.7 million a year.



## CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.

Charges for advertising are: 20¢ per word. Average word count: 7 words per line. \$5.00 minimum. Send payment with order to:

The Journal of KMA  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205

## MEDICAL OPPORTUNITIES

**PRIMARY CARE CENTER** seeks physicians to help it respond to broad community health needs. Opportunity for good life close to the land in beautiful Cumberland Mts. As much time as you want for personal pursuits. Philip Curd, M.D., Box 129, McKee, Ky. 40447. (606) 287-7104.

**MEDICAL DIRECTOR AND PRIMARY CARE PHYSICIANS**—Immediate openings in rural area with growing primary care organization currently operating three clinics in Kentucky. Competitive salary arrangements; excellent fringe benefits including retirement. All applicants must be capable of working as a team member within the framework of a team consisting of other health professionals. Applicants for Medical Director should at least be board eligible in either Family Practice, Internal Medicine or Pediatrics with some experience in Public Health. Direct inquiries to Personnel Officer, Big Sandy Health Care, Inc., City Rt. #1, Prestonsburg, KY 41653, or telephone (606) 886-8546.

**ESTILL HEALTH CARE, INC., KY.** Immediate long-term need for primary care physicians. GP/FP to serve on medical staff. Competitive salary, fringe benefits, plus paid malpractice. Must be eligible for Ky. licensure. For more information call Larry Hershenson, Executive Director, (606) 723-5178.

**APPALACHIAN REGIONAL HOSPITALS**—You're needed in Appalachia! A rural health care system with ten hospitals and several clinics in eastern Kentucky, West Virginia and Virginia will consider and refer applicants for medical staff appointment in the following fields: Emergency Medicine, Family Practice, Orthopedics, Radiology, Internal Medicine, Pediatrics, and Ob/Gyn. ARH provides comprehensive health and health-related services to a major segment of rural Appalachia, all types of practices available including solo, group, etc. Working conditions are in a relaxing atmosphere along with excellent salaries and fringe benefits, including paid malpractice insurance and relocation allowance. Send curriculum vitae to: Gary J. Smock, Manager of Employment, Appalachian Regional Hospital, P.O. Box 8086, Lexington, Kentucky 40503. (606) 255-4431. An equal opportunity employer.

**GENERAL SURGEON AND FAMILY OR GENERAL PRACTITIONER.** Excellent opportunity. Special assistance benefits available. Contact administrator, Pendleton County Hospital, Falmouth, KY 41040, (606) 654-3395.

**PHYSICIAN NEEDED**—Rural Community. New building, first 24 months rent free. Good opportunity for young physician on Rural Scholarship program, or older physician who wants to slow down. Contact Richard Sutton, R.Ph., Box 518, Barlow, KY 42024.

## PROPERTIES FOR LEASE

**DOCTOR'S OFFICE** for lease or rent, 3 years old. G. P. at E. Reynolds Road, Lexington (near Fayette Mall), Ky. EKG, X-Ray, diathermia. Call (606) 233-4511, Ext. 474. Dr. Choi (week days only).

# Librax®

Each capsule contains 5 mg  
chlordiazepoxide HCl and 2.5 mg clidinium Br.

**Please consult complete prescribing information, a summary of which follows:**

**Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

**Contraindications:** Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

**Warnings:** Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur.

**Precautions:** In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

**Adverse Reactions:** No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.





In treating irritable bowel syndrome\*  
Enhance your therapeutic expectations  
with

**Librax<sup>®</sup>**

Each capsule contains  
5 mg chlordiazepoxide HCl  
and 2.5 mg clidinium Br.

**antianxiety/antispasmodic/antimotility**

Librax is unique among G.I. medications  
in providing the specific antianxiety action of  
LIBRIUM<sup>®</sup> (chlordiazepoxide HCl) as well as the potent  
antispasmodic and antimotility actions of  
QUARZAN<sup>®</sup> (clidinium Br) for adjunctive therapy  
of irritable bowel syndrome.



\*Librax has been evaluated as possibly effective for this indication.  
Please see brief summary of prescribing information on preceding page.





# EMPIRIN<sup>®</sup> COMPOUND c CODEINE

Each tablet contains aspirin, 25 mg; phenacetin, 162 mg; and caffeine, 12 mg, plus codeine phosphate in one of the following strengths: #4—60 mg (or 1); #3—40 mg (or 1); #2—30 mg (or 1); and #1—20 mg (or 1). (Warning—only for habit forming.)



Burroughs-Wellcome Co.  
Research Triangle Park  
North Carolina 27709

## **AD HOC COMMITTEE ON INSURANCE PROCEDURES AND PRIMARY CARE REIMBURSEMENT TO HOLD SPECIAL MEETING**

**April 1, 1979, Executive Inn, Louisville**

The KMA Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement will hold a special meeting at 10:00 a.m. on Sunday, April 1, at the Executive Inn, in Louisville. The Committee, which is charged with the development of a report on the issue raised in Resolutions L and Q, passed at the 1978 KMA Annual Meeting, was appointed recently by the Board.

Resolution L called for the Committee to hold a well-publicized meeting to allow KMA members to discuss the Blue Shield Participating Physician's Agreement; the desirability of establishing a similar agreement with other insurers; consideration of reimbursement of physicians by assignment of fees; consideration of the relative merits of various types of insurance and any other significant matters related to health insurance determined at the general meeting.

Resolution Q called for the same Committee to study third party reimbursement systems to remove imbalances in the payment of primary care as compared to non-primary care services and to study the composition of the KMA Advisory Committee to Blue Cross and Blue Shield.

Tentative plans are for the Committee to hear testimony relating to the issues raised in Resolution L at the April 1 meeting. Issues evolving around Resolution Q will be discussed at a separate committee session. In order for the appropriate arrangements to be made, Committee Chairman, James Baumgarten, M.D., Owensboro, has requested that physicians planning to comment on the issues discussed in Resolution L forward their name and topic of discussion to the Headquarters Office to ensure that adequate time can be devoted to each of the questions raised. The members serving on the Ad Hoc Committee are as follows:

**James A. Baumgarten, M.D., Owensboro, Chairman**

Fred C. Rainey, M.D., Elizabethtown

Glenn W. Bryant, M.D., Louisville

Harold D. Haller, M.D., Louisville

Robert S. Tillett, M.D., Louisville

Carl J. Brueggemann, M.D., Covington

Ronald D. Hamilton, M.D., Lexington

Nelson B. Rue, M.D., Bowling Green

Thomas L. Heavern, Jr., M.D., Highland Heights

Bennett L. Crowder, II, M.D., Hopkinsville

James B. Holloway, Jr., M.D., Lexington

Kenneth P. Crawford, M.D., Louisville



## In Memoriam

**FRANK A. SIMON, M.D.**  
1899-1979  
Louisville

Frank A. Simon, M.D., Louisville, died on January 18 at the age of 79. An allergy specialist, Doctor Simon was a graduate of Harvard University and the University of Louisville School of Medicine.

**BYRON N. HARRISON, M.D.**  
1918-1979  
Owensboro

Byron N. Harrison, M.D., Owensboro, died in January 1979. Doctor Harrison, a graduate of Indiana University School of Medicine, was an obstetrician. He was a member of the American Medical Association and the Kentucky Medical Association.

**JOHN W. FORD, M.D.**  
1889-1978  
Inez

John W. Ford, M.D., Inez, died on December 10, 1978 at the age of 89. Ford was a general practitioner in Martin County for many years.

**RAUL C. GONZALEZ, M.D.**  
Bedford, Indiana

Raul C. Gonzalez, M.D., died at his home in Bedford, Indiana in November 1978. A radiologist, Doctor Gonzalez was a member of the Kentucky Medical Association during the time he practiced in Jefferson County, Kentucky.

**ALBERT L. ALLEN, M.D.**  
1907-1978  
Winchester

Word has been received of the death on August 11, 1978 of Albert L. Allen, M.D., Winchester. Doctor Allen, a radiologist, was a 1933 graduate of the Medical College of South Carolina and practiced in Kentucky until his retirement in 1977.



## Did you know . . .

The University of Kentucky has been selected to coordinate a two-year cooperative study of skin-testing devices used to detect tuberculosis. The Federal Drug Administration has awarded a contract of \$420,000 to **H. M. Vandiviere, M.D.**, of UK's department of community medicine. Cooperating in the study will be the North Dakota State Department of Health, the Missouri State Chest Hospital, the Houston Department of Health, the University of Hawaii's Research Cooperation, and the University of North Carolina School of Public Health.

The University of Louisville School of Medicine recently installed a \$62,000 machine which can quickly and accurately identify intoxicating agents in the human body. It will be especially useful and effective in the diagnosis and treatment of drug overdose victims taken to Louisville General Hospital next to the medical school.



## Headquarters Activity

KMA had physicians and staff members in attendance at the following activities and events:

### FEBRUARY

- 1 Physicians Health, Louisville
- 13 *Journal* Editors, Louisville
- 15 Board of Medical Licensure, Louisville
- 15-18 AMA National Leadership Conference, Chicago
- 21 School Health Education Coalition, Bardstown
- 22 Governmental Medical Services, Louisville
- 28 Health Planning Study Committee, Louisville

### MARCH

- 6 Allied Health Group Meeting, Louisville
- 7 McDowell House Board of Managers, Danville
- 8 Paramedic Advisory, Louisville
- 11-13 CEO Conference, Hilton Head, S.C.
- 13 *Journal* editors, Louisville
- 14 Judicial Council, Louisville
- 15 Ad Hoc Study, Louisville
- Licensure Hearing, Louisville
- KMIC Board of Directors, Louisville
- 22 Peer Review, Louisville
- 23 CME, Louisville
- 26 Kentucky Voluntary Effort, Louisville
- 27 Technical Advisory Committee on Physician Services (Title XIX), Louisville
- 28 Kentucky Advisory Council on Medical Assistance, Frankfort
- 29 Executive Committee, Louisville

## HOUSE PHYSICIANS WANTED

St. Elizabeth Medical Center, a 503-bed Medical Center located in Covington and Edgewood, Kentucky, is seeking to fill two House Physician positions for daytime coverage at its new 182-bed Medical/Surgical Hospital. Usual House Physician duties including Code Blue procedure compose these 7 a.m. to 7 p.m. positions. For further information please contact:

Paul C. Bellendorf, Administrator  
St. Elizabeth Medical Center  
401 East Twentieth Street  
Covington, Kentucky 41014  
606-292-4111



## Kentucky Medical Association

Telephone 459-9790 — Area Code 502

3532 Ephraim McDowell Drive

Louisville, Kentucky 40205

### IMPORTANT INFORMATION ABOUT KENTUCKY'S PATIENT COMPENSATION FUND

Kentucky's malpractice relief legislation was short-lived--effective July 1, 1976 and declared unconstitutional in July, 1977. During that period, you and other Kentucky physicians paid an additional 10% on insurance premiums. These proceeds were applied to a Patient Compensation Fund which was held in escrow by our State Insurance Department.

These funds are being released around March 1, 1979. On that date, approximately \$1,000,000 will be returned to Kentucky physicians, with individual amounts ranging from under \$100 to more than \$700.

Your return funds probably are not considered in your budget or cash flow and indeed are of relative minimal personal significance. Collectively, however, the resources of the fund can be extremely important to organized medicine in Kentucky.

Many physicians have expressed a desire to apply their portion of the terminated Fund toward the purchase of stock in Kentucky Medical Insurance Company, our own professional liability insurance company. We recommend that you strongly consider this as a means of helping to ensure a stable insurance market for all KMA members, now and in the future. The mechanics are simple:

1. Complete the enclosed stock order form for the number of shares you desire (\$500 per share).
2. Endorse your refund check to : First Kentucky Trust Company, Escrow Agent.
3. Write your personal or corporation check (payable in the same way) for the remainder of your stock purchase.
4. Send these documents to: Kentucky Medical Insurance Company, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

The leadership of your Kentucky Medical Association believes this is an excellent opportunity for you and other Kentucky physicians to demonstrate support of KMIC.

Your refund check should arrive within the next several days. Be on the lookout for it, and complete the transaction as outlined above as soon as possible.

Thank you for helping to assure the benefits that all Kentucky physicians will gain, for years to come, from a physician-owned and controlled insurance organization.

Sincerely yours,

Carl Cooper, Jr., M. D.  
President, KMA





## **WHAT KIND OF PERSON BECOMES A NAVY PHYSICIAN? DOCTORS JUST LIKE YOU.**

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Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.

# For recurrent attacks of urinary tract infection in women

## Bactrim™ DS Double Strength Tablets



Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

### Just one tablet b.i.d. for 10 to 14 days

- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage:** For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage:** Not recommended for infants less than two months of age.

**Urinary Tract Infections:** Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

| Weight |     | Dose—every 12 hours |                          |
|--------|-----|---------------------|--------------------------|
| lbs    | kgs | Teaspoonfuls        | Tablets                  |
| 20     | 9   | 1 teasp. (5 ml)     | ½ tablet                 |
| 40     | 18  | 2 teasp. (10 ml)    | 1 tablet                 |
| 60     | 27  | 3 teasp. (15 ml)    | 1½ tablets               |
| 80     | 36  | 4 teasp. (20 ml)    | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30                      | Usual standard regimen     |
| 15-30                         | ½ the usual regimen        |
| Below 15                      | Use not recommended        |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



Roche Laboratories  
Division of Hoffmann-La Roche Inc.  
Nutley, New Jersey 07110

Please see back cover.



Her next attack of cystitis may require

# the Bactrim<sup>TM</sup>

## 3-system counterattack



ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has no significant effect on other normal, necessary intestinal flora.

## Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

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Number 4

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APR 25 1979

# The Journal Of The Kentucky Medical Association



# PEDIATRIC INDICATIONS\* FOR BACTRIM CONTINUE TO GROW...

*URINARY TRACT  
INFECTIONS*

*PNEUMOCYSTIS  
CARINII  
PNEUMONITIS*

*SHIGELLOSIS*

*ACUTE OTITIS  
MEDIA*

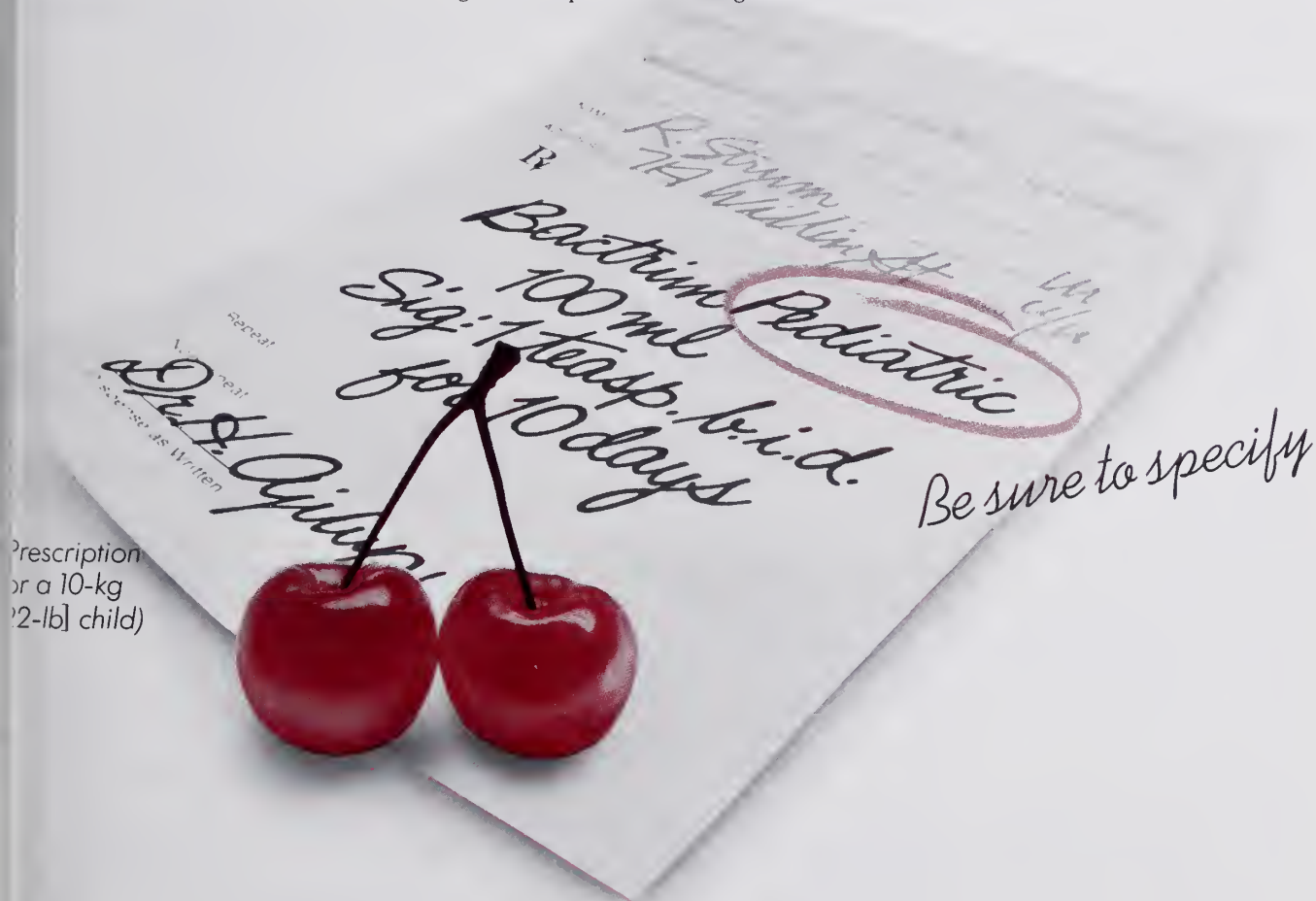
*\*Involving susceptible organisms.*

Please see Indications section in summary of product information on last page of this advertisement.

# NOW... ROCHE INTRODUCES

## NEW CHERRY FLAVOR **BACTRIM<sup>TM</sup>** **PEDIATRIC** **SUSPENSION**

Each teaspoonful (5 ml) contains  
40 mg trimethoprim and 200 mg sulfamethoxazole.



ESPECIALLY FLAVORED  
FOR CHILDREN\*

Also available: The original fruit-licorice flavor to be prescribed  
as "Bactrim Suspension." The same active ingredient formulation—the difference is the flavor.

Contraindicated in children under 2 months of age.

Please see summary of product information on following page.



# BACTRIM

(trimethoprim and sulfamethoxazole)



Before prescribing, please consult complete product information, a summary of which follows:

**Indications and Usage:** For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. **Note:** The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections. For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age. For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A  $\beta$ -hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended. Therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function; possible folate deficiency; severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprol-thrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarthritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage:** Not recommended for infants less than two months of age.

**URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN**

**Adults:** Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp (20 ml) b i d for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

**Children:** Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis. A guide follows. **Children two months of age or older**

| Weight |     | Dose—every 12 hours |                          |
|--------|-----|---------------------|--------------------------|
| lbs    | kgs | Teaspoonfuls        | Tablets                  |
| 22     | 10  | 1 teasp (5 ml)      | ½ tablet                 |
| 44     | 20  | 2 teasp (10 ml)     | 1 tablet                 |
| 66     | 30  | 3 teasp (15 ml)     | 1½ tablets               |
| 88     | 40  | 4 teasp (20 ml)     | 2 tablets or 1 DS tablet |

For patients with renal impairment

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30                      | Usual standard regimen     |
| 15-30                         | ½ the usual regimen        |
| Below 15                      | Use not recommended        |

**PNEUMOCYSTIS CARINII PNEUMONITIS:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole; bottles of 100, Tel-E-Dose® packages of 100. Prescription Paks of 20 Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole; bottles of 100 and 500. Tel-E-Dose® packages of 100. Prescription Paks of 40, available singly and in trays of 10. Pediatric Suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; cherry flavored; bottles of 16 oz (1 pint). Suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

## April, 1979 Meetings

- April 4-7 **Tennessee Medical Association**  
Airport Milton Inn  
Memphis, Tennessee
- April 19-21 **Alabama Medical Association**  
Birmingham Hyatt House, Civic Center  
Birmingham, Alabama
- April 19-22 **Missouri State Medical Association**  
Chase-Park Plaza Hotel  
St. Louis, Missouri
- April 20-22 **Georgia Medical Association**  
De Soto Hilton  
Savannah, Georgia
- April 21-22 **Iowa Medical Society**  
Hyatt House  
Des Moines, Iowa
- April 22-25 **Arkansas Medical Society**  
Little Rock Convention Center  
Little Rock, Arkansas
- April 25-29 **Arizona Medical Association**  
Safari Hotel  
Scottsdale, Arizona
- April 26-29 **South Carolina Medical Association**  
Myrtle Beach Hilton  
Myrtle Beach, South Carolina
- April 29-May 2 **Nebraska Medical Association**  
Holiday Inn  
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Volume 77 • April 1979

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# The Journal Of The Kentucky Medical Association

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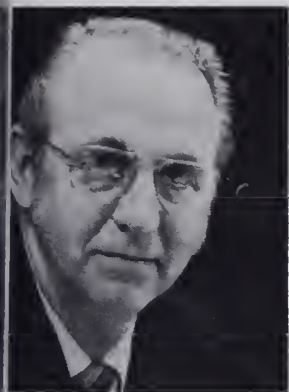
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# MESSAGE FROM THE PRESIDENT



**A**t no time in the history of medicine in the United States has it been more important for all physicians to stick together. I feel that there is a very definite concerted effort by certain individuals in several departments of government to try to place the blame of high medical costs and inadequate care at the feet of organized medicine. We must improve our public relations and demonstrate our concern in every possible way.

During the past few weeks I have received correspondence from KMA members who have expressed concern over some of our problems. They point out that organized medicine's approach to solving them, and many times the end result, do not fully satisfy them as individuals.

One letter pointed out that organized medicine is catching all the blame for increasing the cost of medical care when other factors such as wage increases and supply costs must be considered. The writer also made clear the responsibility of government, with its increasing regulations and red tape, for the major portion of the increased cost of medical care, but noted this factor is not being publicized.

Another letter reviewed the plight of some medical specialties and practices which are being usurped by allied medical fields, noting that these allied positions are often higher paid and even supervise physicians who are better trained.

Others are up in arms about the AMA House of Delegates' action concerning the much-publicized chiropractic lawsuit and what its effect could be in certain areas, such as hospital-based radiologists.

What I would like to point out is that each of these individuals, in spite of their complaints, have continued to renew their membership, realizing that the only way organized medicine can be strong is through unity. Even though we are oft times not in agreement with some of the actions of KMA and AMA, they have been subjected to free discussion and vote prior to finalization.

These types of problems were discussed at the recent AMA Leadership Conference in Chicago and are reported in the March 2 *AMA News*. I hope you read it.

I urge all of you to elevate your support of organized medicine on all fronts—and to exercise your prerogative to participate in all activities of your Association.

Let me again remind you that cost containment is our primary target at present. Please do your part, and if you have any suggestions, please send them in.

CARL COOPER, JR., M.D.  
KMA President



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- 23 Problems of Sepsis, University of Louisville Health Sciences Center. For information call (502) 588-6185.

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- 24-27 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

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A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

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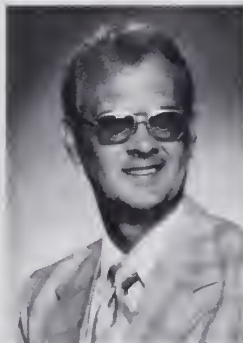
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# *The* JOURNAL *of the* Kentucky Medical Association

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## Management of Carcinoma of the Larynx

Gary L. Griffith, M.D., William R. Meeker, M.D., Anna McMahan, R.N., and Edward Luce, M.D.  
Lexington, Kentucky

Staging of laryngeal cancer, according to the 1977 American Joint Committee for Cancer Staging and End-results Reporting, is described. Treatment philosophies for each Clinical Stage of disease are presented. Application of TNM staging system to 151 patients who received primary treatment of laryngeal cancers are presented. Crude and adjusted three and five year survival rates for the various stages are presented. These survival figures appear comparable to those reported from other medical centers.

**T**HERE are approximately 9,000 new cases of carcinoma of the larynx each year in the United States. This disease is responsible for an estimated 3,500 deaths annually. At the time of diagnosis, 56% of these patients have localized disease, 31% have regional spread, and 10% have distant metastases.<sup>1</sup> The association of alcohol and tobacco abuse with this disease entity has long been recognized.<sup>2</sup>

Symptomatically, carcinoma of the larynx may be divided into two groups: intrinsic laryngeal

carcinoma and extrinsic laryngeal carcinoma. These two groups have separate prognostic implications with respect to their curability. Factors favoring the curability of intrinsic lesions (or glottic lesions) are that hoarseness is produced at an early stage in the disease and that the vocal cords have a sparse lymphatic supply. Thus as a rule, these lesions become symptomatic at a very early stage, usually long before regional extension has had an opportunity to occur. Unfortunately, the average patient who is hoarse because of laryngeal carcinoma sees three physicians and waits on an average eight months before a doctor finally looks at his larynx and makes a diagnosis.<sup>3</sup> Therefore, hoarseness lasting longer than two weeks demands that a physician evaluate the larynx.

On the other hand, carcinoma of the extrinsic or non-glottic larynx unfortunately tends to be silent, and therefore, does not become symptomatic until much later in the disease process. Due to the rich lymphatic supply of the extrinsic larynx, these tumors not infrequently present as a positive node in the neck, by which time the likelihood of curability is diminished.

The accurate diagnosis of carcinoma of the larynx depends upon a thorough clinical evaluation. Indirect mirror examination of the larynx is mandatory, and careful palpation of nodal stations is essential for the documentation of regional and metastatic spread. Direct laryngoscopy is invaluable as an aid to the detection of subglottic involvement. Laboratory and roentographic evaluations are also beneficial. Soft tissue films, tomograms, and laryngograms are all of

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*Presented at the meeting of the Kentucky Chapter, American College of Surgeons, September 26, 1978, Lexington, Kentucky.*

value in documenting translaryngeal or subglottic extensions. Barium swallows, chest x-rays and blood chemistries will help to document the involvement of contiguous organs, distant metastatic spread and, also, to uncover other occult medical disorders which may alter the patient's ability to tolerate the various therapeutic modalities to which he might be subjected.

For the purpose of anatomic classification, the larynx may be divided into three separate regions: the supraglottic region, the glottic region, and the subglottic region. The supraglottic region consists of the ventricular bands or false cords, the arytenoids, and both the lingual and laryngeal aspects of the epiglottis. The glottic region is composed solely of the true vocal cords, including the anterior and posterior commissures. The subglottic region consists of the subglottic larynx, including the cricoid.

For the purposes of a unified classification system through which various centers or individuals may accurately describe and compare laryngeal carcinomas, the TNM system of classification has been accepted.<sup>4</sup> The T is the designation of tumor extent, the N is the absence or presence and degree of nodal involvement, and the M is used to denote metastatic spread.

Returning to our anatomic regional divisions, the TNM system works as follows. For supraglottic laryngeal carcinoma, TIS designates *in situ* lesions. T1 describes a lesion confined to the region of origin with normal cord fixation and T2 lesions involve adjacent supraglottic sites or the glottis without cord fixation. A T3 lesion is limited to the larynx with cord fixation and/or extension to involve the post cricoid area, the medial wall of the pyriform sinus or the pre-epiglottic space. A T4 lesion extends beyond the larynx to involve the oropharynx, the soft tissues of the neck, or the destruction of the thyroid cartilage.

Glottic carcinomas are similarly classified, TIS being *in situ*, T1 confined to the vocal cord or cords with normal mobility, and T2 implying supra and/or subglottic extension with normal or impaired cord mobility. A T3 lesion is confined to the larynx with cord fixation and T4 designates thyroid cartilage destruction and/or extension beyond the confines of the larynx.

The subglottic lesions are also similarly classified, with T1 implying tumor limited to the region or origin, T2 indicating glottic involvement

without fixation, T3 denoting cord fixation, and T4 indicating extralaryngeal extension or cartilage destruction.

The nodal assessment is divided into five categories as follows: NX means nodes cannot be assessed, NO indicates no clinically positive nodes are present, and N1 is the presence of a single positive homolateral node less than 3 cm in diameter. The N2 stage is broken into N2A and N2B stages; N2A being a clinically positive homolateral node 3-6 cm in diameter and N2B indicating multiple positive homolateral nodes no larger than 6 cm in diameter. N3 lesions are subgrouped as A, B, and C; A being massive homolateral nodes, B indicating bilateral nodes and C designating contralateral nodes.

The M designation is much less complicated; MX indicating that metastatic spread cannot be assessed and M0 and M1 being the absence or presence of distant metastases respectively.

The value of the TNM classification is in the assignment to stages which are of both therapeutic and prognostic value (Table).

Stage I consists of TINOMO lesions which have usually been treated with radiation at our institution. This treatment, consisting of 6000-7000 rads over 6 to 7 weeks, usually preserves a good to excellent quality voice.

Stage II contains the slightly more advanced T2N0M0 lesions which have spread within the larynx beyond their region of origin, but have not resulted in cord fixation or nodal involvement. These lesions frequently were treated, usually with curative doses of irradiation, reserving surgery for salvage of irradiation failures. A normal voice may be preserved in a significant number of these patients, using this treatment philosophy.

Stage III lesions in which cord fixation has occurred, with or without nodal involvement, were, in a majority of instances, treated by primary surgery or by planned pre-operative radiation consisting of 5000-6000 rads in five to

**Table**  
**STAGE GROUPING**

|           |                        |
|-----------|------------------------|
| Stage I   | T1 NO MO               |
| Stage II  | T2 NO MO               |
| Stage III | T3 NO MO               |
|           | T1 or T2 or T3, N1, MO |
| Stage IV  | T4, NO or N1, MO       |
|           | Any T, N2 or N3, MO    |
|           | Any T, Any N, M1       |

six weeks, followed in four to six weeks by total laryngectomy, often in combination with radical neck dissection. Unfortunately, some patients fail to return for surgery at the planned time and wait until upper airway obstruction from recurrent tumor requires surgical intervention for relief. Others never return for the planned surgery.

Stage IV lesions consist of cases in which tumor has spread beyond the confines of the larynx, or in which advanced nodal spread or distant metastases has occurred. Patients without distant metastases are, as a rule, treated with combined pre-operative radiation and surgery. Patients with distant metastases are treated with chemotherapy.

Over the past 15 years, 151 patients with laryngeal carcinoma have been seen and treated for cure at the University of Kentucky. Fifty-two patients were treated primarily with radiation, twenty-eight patients primarily with surgery, and seventy-one patients received combined therapy, either as a planned modality or as surgical salvage of radiation failures. The distribution extended from the third to ninth decades, with the majority, as one might expect, falling in the sixth and seventh decades. A strong male predominance was noted, with only one-sixth of patients being females. The vast majority of our patients were Caucasian (86%), probably reflecting more our patient population than true incidence.

Squamous carcinoma was the histology in 98% of the cases. Of the squamous carcinomas, approximately one-third were not further classified as to degree of differentiation. Of the remainder, 41% were classified as moderately-well differentiated; 31% as well differentiated, and 28% as poorly differentiated.

Of laryngeal cancers, 32% were Stage I or II and 66% were Stage III and IV. Data was insufficient to stage the cases in 2%. Of Stage I and II patients, 86% received primary radiation therapy, whereas only 26% of Stage III and IV patients were treated primarily with radiation. Forty-eight percent of Stage III and IV patients were treated with planned pre-operative radiation therapy followed by surgery, and the remaining were treated primarily by surgery. Forty-six percent of the patients treated primarily by surgery subsequently received post-operative radiation.

A number of operative complications occurred in patients treated by preoperative radiation

therapy and surgery, or by primary surgery. These included pharyngocutaneous fistulae, tracheoesophageal fistulae, esophageal strictures, tracheal stenosis, skin flap necrosis, and carotid artery blow out. The vast majority of these complications, with the exception of tracheal stenosis, occurred in patients receiving combined therapy, thus demonstrating the deleterious effect of irradiation on wound healing. The predominance of tracheal stenosis in the pure surgical group on the other hand, emphasizes the importance of good surgical technique in stomal creation.

It is also significant to note that the only mortalities occurring as a result of wound complications occurred in those patients receiving combined therapy. In addition, a definite relationship seemed to exist with respect to the interval between irradiation and subsequent surgery, with two-thirds of the complications occurring in those whose surgery was delayed more than six weeks following completion of radiotherapy.

The overall crude survivals, according to Stage, for our series, were 80% for Stage I at three years, and 63% at five years. When adjusted for deaths due to causes other than laryngeal cancer, the survival rate at five years improves to 76% for Stage I cancer. For Stage II, the three year crude survival rate is 58% and at five years is 32%. The adjusted three year and five year survivals for Stage II disease are 66% for each. The crude survival rates for Stage III are 60% at three years and 26% at five years. The adjusted survivals for Stage III disease are 56% at three years and 50% at five years. Crude three year and five year survival rates for Stage IV are 27% and 9%. Adjusted three year and five year survivals for Stage IV are 39% and 29% respectively. These figures compare favorably with those reported from other centers.<sup>3,5</sup>

### Summary

The presence of hoarseness in a male in his sixth or seventh decade should alert one to the presence of laryngeal carcinoma. With adequate medical evaluation, the vast majority of these lesions should be detected at an early stage and be successfully managed with either radiation therapy, or in a slightly more advanced group, with surgical therapy, with five year survivals approaching 80% in Stage I and 60% in Stage II disease. The addition of radiation therapy in high



dose programs to planned surgical excision appeared to significantly increase the postoperative morbidity and mortality in our patients, especially if surgical therapy was delayed beyond six weeks following completion of radiation therapy. Survival did not appear to be improved by addition of pre-operative radiation.<sup>6</sup> Overall survival by stage of disease, especially when adjusted for deaths due to causes other than laryngeal cancer, appears comparable to that reported by others.

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# Relative Annual Frequencies of Cancer at Two Louisville Hospitals

John S. Spratt, Jr., M.D., M.S.P.H., and John P. Sandoz, M.S.  
Louisville, Kentucky

The purpose of this article is to report on changes in relative annual frequencies of selected types of cancers at Norton-Children's Hospital (NCH) and Louisville General Hospital (LGH). Both hospitals maintain tumor registries and were the sources for the data used in this report. The data from Louisville General span a 30-year period beginning in 1948 and include 9044 cases, while that from Norton-Children's begin with 1968 and involve 4419 cases. A large number of variables impact on the milieu from which the patients come to those hospitals and, in the absence of trials which control or match on these variables, it is impossible to make substantive statements about the environmental etiology of changes in cancer incidence. Also, for the real changes in frequency of cancers in the ambient population to be documented, a population-based rather than hospital-based registry would be essential.

## Method

THE number of cancers diagnosed at each site each year was divided by the total number of newly diagnosed cancers in each year. These percentages for each year were then plotted after being smoothed. Smoothing is a simplifying statistical step which helps uncover any trends in the yearly percentages.<sup>1</sup>

## Discussion

The annual incidence rates of a cancer records cancers that surface to a diagnosable size in that year. The cancers may have begun in the same year they were discovered or they may have begun many years previously if slow growing. A first time screening program picks up all these slowly growing cancers and the prevalence, not the annual incidence, of cancers in the population is discovered. In years of subsequent screening of the same population, the discovered cancers will be of the more acute variety and if the screening is continued for enough years the true annual incidence is approached. Only if the screen is effectively discovering precancerous conditions will the true annual incidence ultimately drop as a result of screening and earlier treatment. Decline in incidence can also occur for reasons unrelated to screening. Both situations may exist in the LGH group—cervix is declining, possibly because of effective screening for a precancerous condition, while stomach cancer is also disappearing for reasons unknown. The relative annual frequency of breast cancer shows a dramatic rise at NCH but is subsequently dropping below previous levels. The event in this period that could have influenced these changes was extensive mammographic screening for breast cancer to uncover slower growing prevalent cancers.

Figure 1 shows the frequency of bladder cancer as a percent (smoothed) of total cancer cases. There is no readily apparent upward or downward trend at either hospital. Regarding breast cancer as shown in Figure 2, the relative frequency at LGH decreased until 1961 but has been slightly increasing since then. The pattern at NCH is striking because of the increase over the years 1972 through 1975, but the return to much lower relative frequency the past two years could lead us to speculate that the higher frequencies were due to those cases discovered by the Breast Cancer Demonstration and Detection Project. In

*From the Cancer Center, University of Louisville School of Medicine, Louisville, Kentucky.*

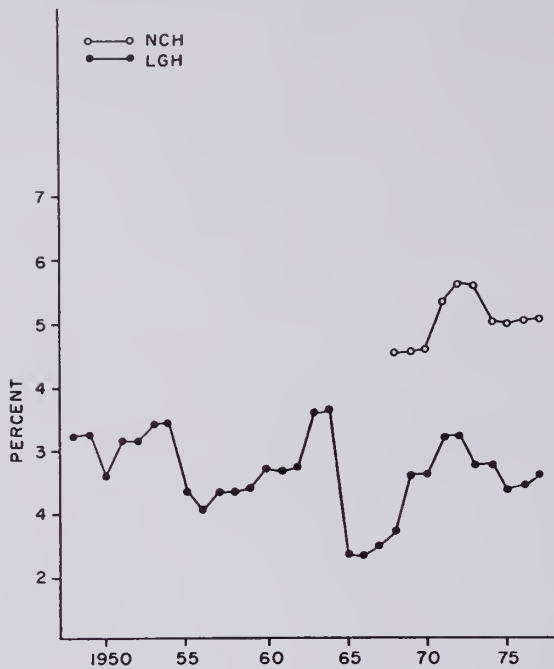
BLADDER CANCER :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

Figure 1.

Figure 3, the distinct downward trend at NCH exists through 1974. Whether the increase at NCH since 1975 is simply an anomaly or represents some periodic change in the population remains to be seen. Colorectal cancer (Figure 4) does not exhibit any overall trend at either hospital although the frequencies at both institutions have fallen during the past three years. There is little evidence of any trend in the frequency of leukemias and lymphomas at LGH (Figure 5). The frequency of this group of diseases seems to have decreased at NCH beginning in 1972. Figure 6 shows the two-fold increase in the relative frequency of this group of mouth and pharynx cancers at both LGH and NCH. Equally striking is Figure 7 with its pronounced upward trend in the relative frequency of lung cancer at both institutions. Smoking habits and increases in air pollution together with airborne pollutants in the industrial environment are possible causes of the trends. Melanomas and other skin lesions shown in Figure 8 have increased more than two-fold at NCH since 1969, while their frequency at LGH has decreased slightly over the past twenty years. The pronounced downward trend in cancer of the stomach (Figure 9) at both hospitals is

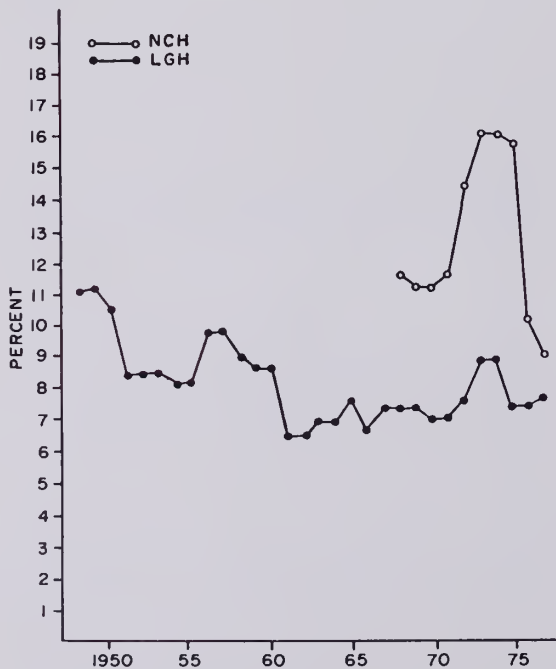
BREAST CANCER :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

Figure 2.

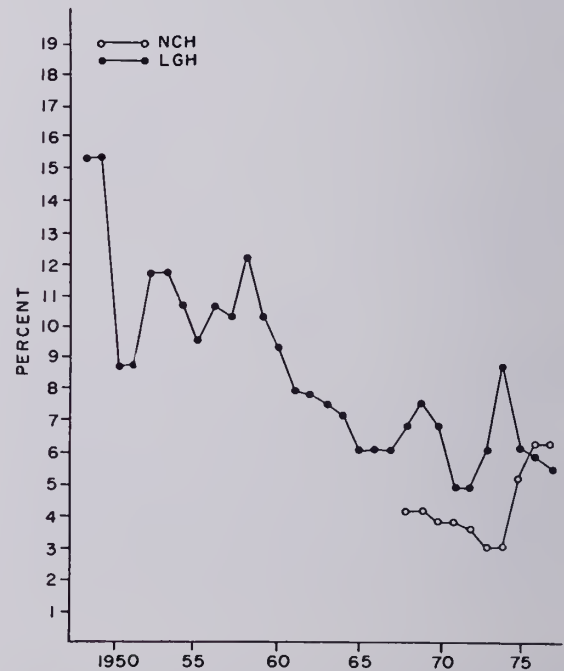
CANCER OF THE CERVIX (INVASIVE) :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

Figure 3.



COLORECTAL CANCER :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

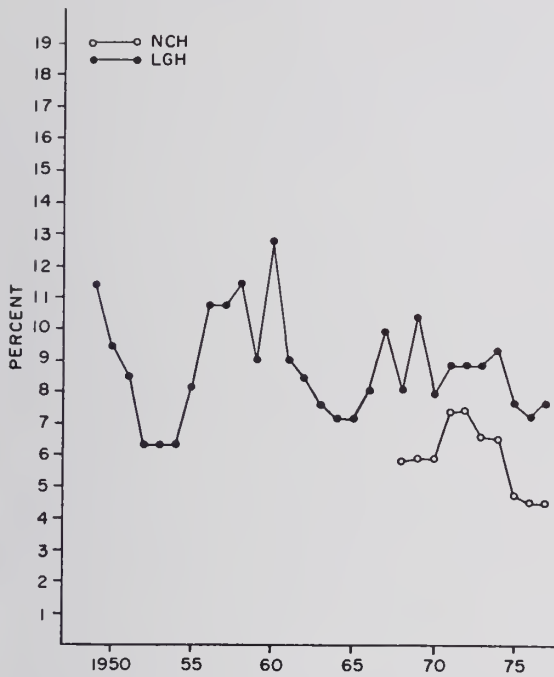


Figure 4.

MOUTH AND PHARYNX :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

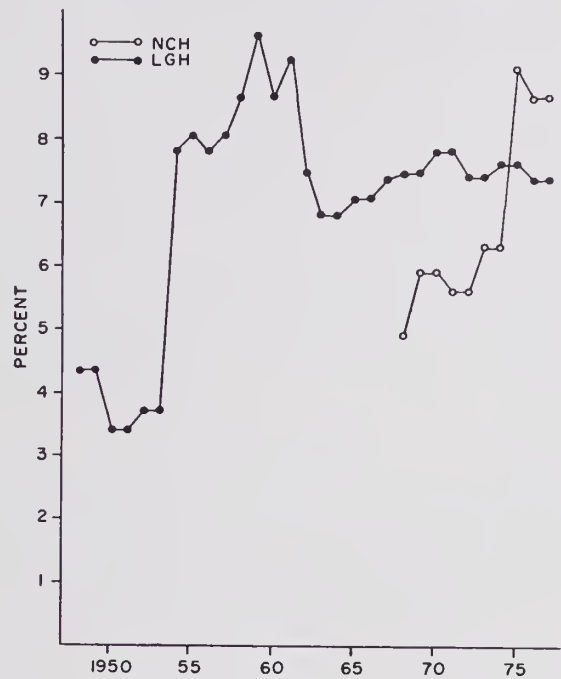


Figure 6.

LEUKEMIA AND LYMPHOMA :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

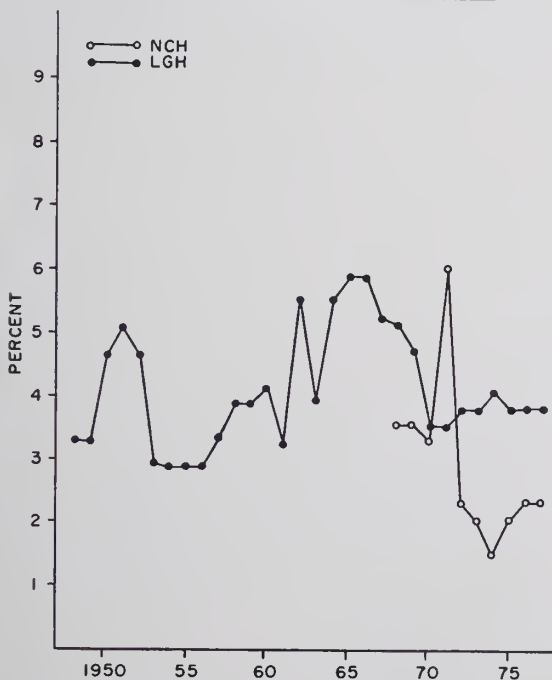


Figure 5.

LUNG CANCER :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

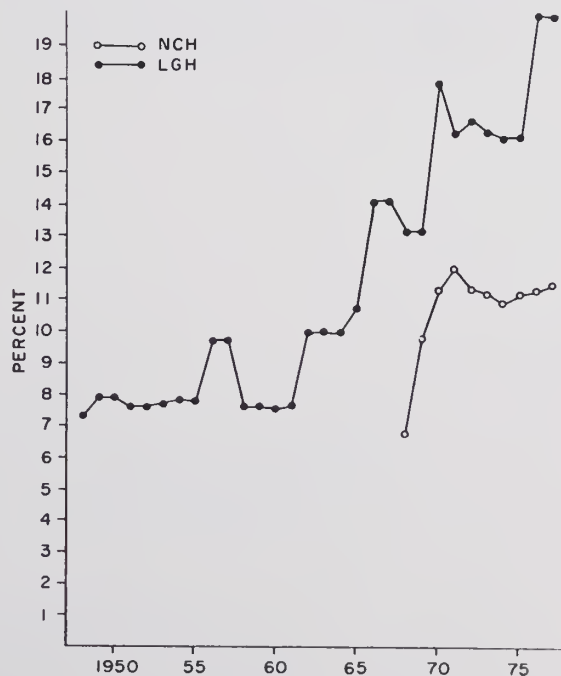


Figure 7.

SKIN AND MELANOMA :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

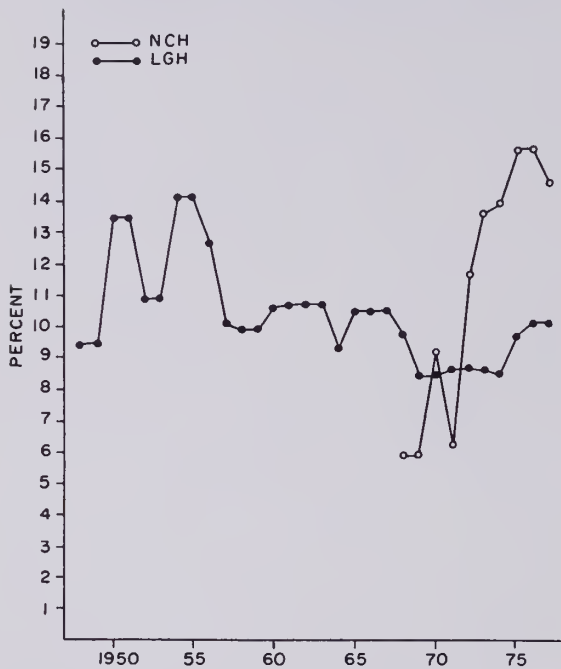


Figure 8.

consistent with nationwide trends. Figure 10 contrasts the sharp increase in the relative frequency of uterine cancer at NCH with the contrast frequency at LGH.

Finally, some descriptive comparisons between the relative frequencies seen here at LGH and NCH with the corresponding figures published in 1976 by the U.S. Department of Health, Education and Welfare in *Cancer Patient Survival, Report Number 5* are useful.<sup>2</sup> The Table shows the relative frequency of cancers of these ten groups based on data from the Third National Cancer Survey. Incidence rates from that survey were adjusted to the 1970 standard population of the United States; these data in the table for NCH and LGH are presented for only that year for purposes of comparison. What is important to note is the consistency in preponderance of lung, breast and colorectal cancers among all cancers as well as the diminishing frequency of stomach cancer. The trends in LGH and NCH parallel the changes in relative annual frequency of cancers seen in hospitals in two other geographic areas, Missouri and Southern California.<sup>3,4</sup> Continued changes in these trends are to be expected in the future if the current predictions on exposure to carcinogens in the workplace hold true.<sup>5</sup>

CANCER OF THE STOMACH :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

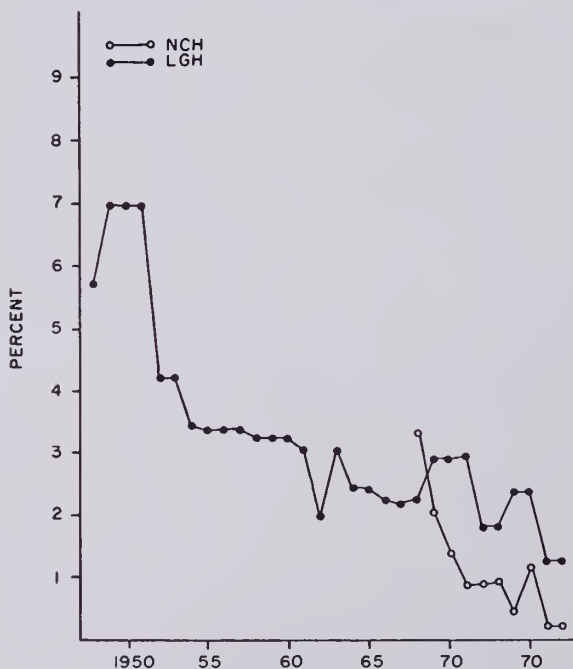


Figure 9.

CANCER OF THE UTERUS :  
PERCENT (SMOOTHED) OF TOTAL CANCER CASES

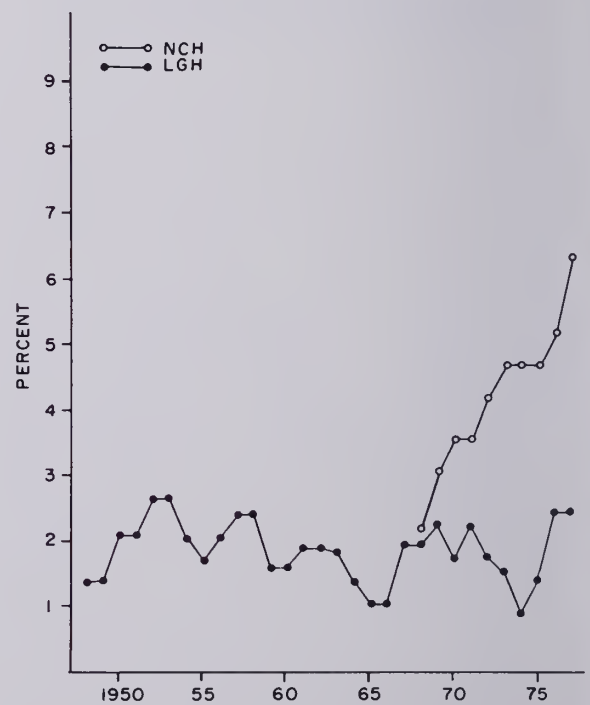


Figure 10.

Table 1

| Cancers             | RELATIVE FREQUENCIES (PERCENTAGE) |          | OF CANCERS                |                          |
|---------------------|-----------------------------------|----------|---------------------------|--------------------------|
|                     | 1970 NCH                          | 1970 LGH | Third National U.S. White | Cancer Survey U.S. Black |
| Bladder             | 4.6                               | 2.6      | 4.5                       | 2.3                      |
| Breast (F)          | 10.4                              | 6.8      | 13.8                      | 10.4                     |
| Cervix (Invasive)   | 3.8                               | 8.4      | 2.7                       | 6.3                      |
| Colorectal          | 5.9                               | 6.5      | 15.0                      | 11.8                     |
| Leukemia & Lymphoma | 6.1                               | 3.6      | 6.7                       | 5.2                      |
| Mouth & Pharynx     | 7.6                               | 7.8      | 3.1                       | 3.0                      |
| Lung                | 13.2                              | 17.9     | 13.1                      | 15.6                     |
| Skin & Melanoma     | 4.3                               | 8.8      | 1.5*                      | 0.3*                     |
| Stomach             | 2.0                               | 3.3      | 3.3                       | 4.5                      |
| Uterus              | 3.6                               | 2.3      | 3.8                       | 2.0                      |

\*Melanoma only

### Conclusion

Changes in the relative annual frequencies of cancers seen at two Louisville hospitals parallel trends noted in other hospitals and the incidences noted in national surveys. No cause and effect conclusions can be drawn from these trends, but their striking and continuing changes merit periodic reassessment for cancer control planning. The most dramatic changes in every study stress the increase in cancers of the respiratory tract. Though

excessive tobacco use is the dominant culprit, it is not the only one. Urban and industrial areas, where a wide variety of pollutants can induce cancers, can act either as a primary carcinogen or as a cocarcinogen.

Cancer is to a large degree a cultural and behavioral disease. Its incidence over time constantly changes as population exposure to inducing factors varies and as various cancer control efforts impact early cancer or precancer in different ways. That these trends are occurring continuously emphasizes the need for concurrently accessioned controls for the evaluation of intervention methods.

### ACKNOWLEDGEMENT

The authors express their thanks to Doctor Hiram Polk and Ms. Rowland Durrett of Louisville General Hospital and Doctor George Sanders and Ms. Barbara Marx at Norton-Children's Hospital for their assistance in providing the data necessary for this paper.

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# A Clinical Approach to the Choice of Antimicrobial Usage, Case Number Four: Sinusitis

Martin J. Raff, M.D., Patricia A. Barnwell, B.S., and Julio C. Melo, M.D.

Louisville, Kentucky

This is the fourth in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choices of antimicrobial agents and explanations of why the authors choose one as the best agent.

A 28-year-old white female is seen by her family practitioner with a recent history of severe recurrent frontal headaches. On this occasion she presents with a complaint of low grade fever, increasing severity of headache, malaise, pain over the right zygomatic arch, the right maxillary sinus and gingivae and the right supra-orbital area. The pain has not been present upon awakening in the morning but usually begins within two hours after getting out of bed, increasing gradually in intensity until the late afternoon when it remits. She has also noted purulent nasal discharge. Physical examination reveals tenderness over the right frontal and maxillary sinuses and tenderness reflected into the area of the right maxillary sinus by pressure on the right upper teeth. Examination of the right naris shows edema and hyperemia of the nasal turbinates with purulent exudate draining from the middle meatus. The maxillary and frontal sinuses on the right appear opaque to transillumination. X-ray shows clouding of the right frontal sinus and a fluid level in the right maxillary sinus. Gram stain of the purulent material reveals small, coccobacillary gram-negative organisms and many polymorphonuclear leucocytes.

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From the Section of Infectious Diseases, Department of Medicine and the Department of Microbiology and Immunology, University of Louisville School of Medicine, Louisville, Kentucky.

Therapy is instituted with a narcotic analgesic to alleviate the pain. A vasoconstrictor is applied as nose drops or spray every four to six hours to promote drainage, along with hot wet packs to the areas over the sinuses and the use of inhaled moist warm air. In order to treat specifically and prevent the development of complications such as subdural empyema, osteomyelitis of the skull and facial bones and brain abscess, one of the following antimicrobial agents should be added to the above regimen.

- A. Erythromycin 250 mg po qid.
- B. Cephalexin (Keflex®) 250 mg po qid.
- C. Chloramphenicol 250 mg po qid.
- D. Ampicillin 500 mg po qid.
- E. Penicillin VK 250 mg po qid.

**Answer: D. Ampicillin**

The most common etiologic agents responsible for acute bacterial infection of the paranasal sinuses are *Hemophilus influenzae* and *Streptococcus pneumoniae*. *Staphylococcus aureus* is an uncommon cause of acute sinusitis; however, this organism is frequently present in specimens contaminated with nasal flora.<sup>1</sup> In cases where purulent drainage can be obtained, gram stains of this material can provide an initial indication of what is the most likely etiologic agent of infection. In this patient, the small coccobacillary gram-negative organisms suggest the presence of *Hemophilus influenzae*. Choices A and E would be incorrect since neither erythromycin nor penicillin is effective against *H. influenzae*. Although cephalexin may be effective both *in vitro* and clinically against *H. influenzae*, meningitis has occurred as a complication of a parameningeal focus of infection with a sensitive organism when the patient has been treated with a cephalosporin.<sup>2</sup> This is due to the failure of cephalosporins, including cephalexin, to attain significant levels in the cerebrospinal fluid.<sup>3</sup> In addition, cephalexin is less effective against *Streptococcus pneumoniae*

and *Hemophilus influenzae* than is ampicillin. Chloramphenicol would be effective against *H. influenzae* and would also provide adequate coverage should these organisms have already entered the meningeal space. However, chloramphenicol has severe inherent potential toxicity. There is evidence that it is the oral form of this compound which is primarily responsible for the idiopathic aplastic anemia which infrequently follows its usage.<sup>4</sup> Therefore, ampicillin would be the therapeutic agent of choice in this instance. Although ampicillin-resistant strains of *H. influenzae* have been reported,<sup>5,6</sup> these are not usually associated with localized infection of the upper respiratory tract; rather, such strains have more often been implicated in the production of meningitis. In addition, should the organism prove to be resistant to ampicillin when sensitivities become available 24 to 48 hours later, the choice of antibiotic can be altered appropriately.

Another compound which could be employed in this instance is trimethoprim-sulfamethoxazole (Bactrim® or Septra®), and this would have been an entirely satisfactory substitute for ampicillin. Ampicillin is also an excellent empirical choice when the nature of the infecting agent is unknown, since it is effective not only against *H. influenzae* but also against *Streptococcus pneumoniae* (pneumococcus) and the anaerobic flora of the upper respiratory tract. If *Staphylococcus aureus* proves to be the infecting agent, therapy can be altered appropriately when cultures return.

In patients with chronic sinusitis, anaerobic bacteria may be involved, either alone or in combination with aerobes. This occurs because the chronic inflammatory process induced by the aerobic pathogens produces some tissue necrosis, decreases vascular supply to the area, and lowers the redox potential in the tissues. The anaerobic flora of the upper respiratory tract can invade this environment successfully. In such a situation, one of the following antibiotics would be the best choice of therapy:

- A. Clindamycin (Cleocin®)
- B. Chloramphenicol
- C. Metronidazole (Flagyl®)
- D. Cefoxitin (Mefoxin®)
- E. Ampicillin

**Answer: E. Ampicillin**

Although all of the first four choices may be used successfully against most anaerobic bacterial

pathogens, including *Bacteroides fragilis*, ampicillin remains quite effective for this particular condition. Almost all of the anaerobic bacteria of the upper respiratory tract are sensitive to ampicillin, and in fact to penicillin.<sup>7</sup> Treatment with those compounds which are directed primarily against *B. fragilis* is unnecessary, as this organism is an infrequent cause of anaerobic sinusitis.<sup>1</sup>

Surgical correction of sinusitis should almost never be undertaken during the acute episode because of the risk of extending the infection and producing osteomyelitis of the facial bones or skull.<sup>8</sup> In chronic cases, when the usual modalities of management have not corrected the situation, irrigation through antral puncture or other appropriate surgical procedures may be necessary. Careful dental examination should always be performed on patients with sinusitis, since a sinus infection may originate from a peridental source, which may require mechanical correction.

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| Net Enrollment Gain or Loss (Members)..... |                            | 16,665      | 33,854      |
| Percent of Net Increase or Decrease.....   |                            | 1.19%       | 2.48%       |
| New Employee Groups Enrolled.....          |                            | 2,382       | 1,759       |

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| Indemnity.....  | 514,914              | 436,740          | \$19,236,614           | \$16,857,354        |
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| Champus*.....   | -0-                  | 3,843            | -0-                    | 266,453             |
| Extended Benefits,<br>BCBS Medicare<br>Supplement, Major<br>Medical and F.E.P.<br>Supplemental..... | 236,864              | 210,782          | 21,039,716             | 18,612,806          |
| <b>Grand Totals.....</b>  | <b>1,305,308</b>     | <b>1,121,457</b> | <b>\$69,039,716</b>    | <b>\$60,416,589</b> |

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### Brief Summary

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**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in the evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in the morning. Tenuate is not recommended for use in children under 12 years of age.

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Product Information as of April, 1976

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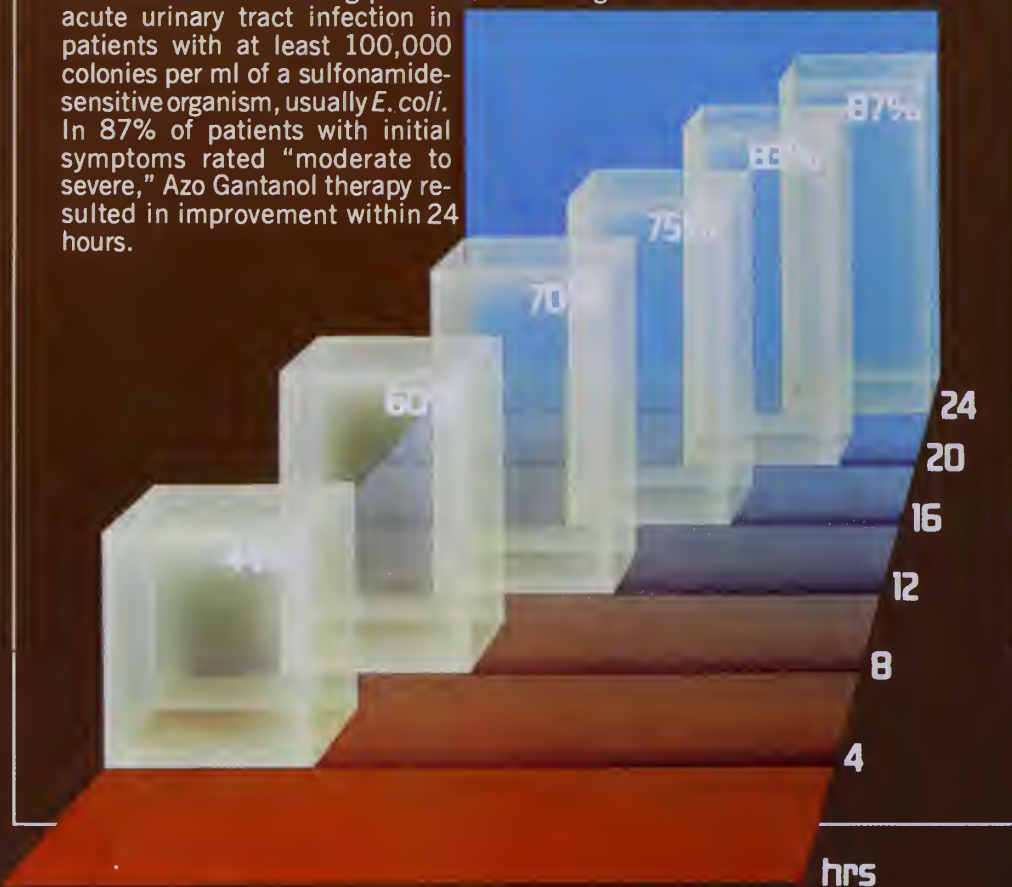
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**Contraindications:** Children below age 12; sulfonamide hypersensitivity; pregnancy at term during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatic uremia, and pyelonephritis of pregnancy with disturbances.

**Warnings:** Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, severe allergic bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypochromia, thrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, sensitization, arthralgia and allergic myositis); *G.I. reactions* (nausea, emesis, abdominal pain, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to chemical similarities with some goitrogenic agents (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused instances of goiter production, diuresis and glycosuria. Cross-sensitivity with these agents may exist.

**Dosage:** Azo Gantanol is intended for the painful phase of urinary tract infections. **Adult dosage:** 2 Gm (4 tabs) initially, then (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) should be considered.

**NOTE:** Patients should be told that the orange dye (phenazopyridine HCl) will color the urine.

**Supplied:** Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and



Roche Laboratories  
Division of Hoffmann-La Roche  
Nutley, New Jersey 07110

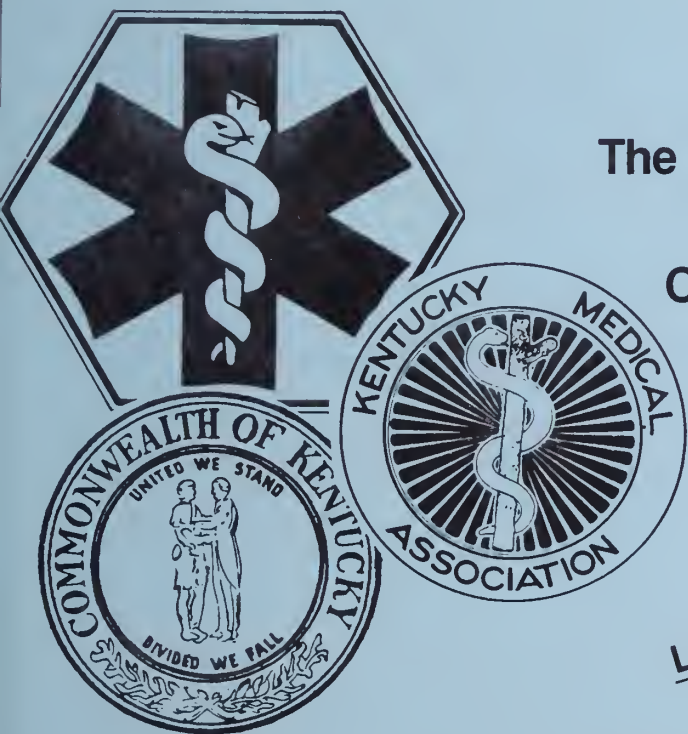
**9th annual**

# **EMERGENCY MEDICAL CARE SEMINAR**

**and**

**4th annual**

# **EMERGENCY MEDICAL SERVICES CONFERENCE**



JOINTLY PRESENTED BY  
**The Kentucky Medical Association**  
&  
**Commonwealth of Kentucky**

**JUNE 6 - 7, 1979**

**LOCATION CHANGED**  
TO  
**RAMADA INN / BLUEGRASS CONVENTION CENTER**  
I-64 & Hurstbourne Lane  
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— Continuing Medical Education Credit Applied For From —

AMERICAN ACADEMY OF FAMILY PHYSICIANS  
KENTUCKY CHAPTER, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS  
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AMERICAN MEDICAL ASSOCIATION  
EMERGENCY DEPARTMENT NURSES ASSOCIATION  
NATIONAL REGISTRY OF EMERGENCY MEDICAL TECHNICIANS

For Information Contact: KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205  
(502) 459-9790

9th ANNUAL KMA EMERGENCY MEDICAL CARE SEMINAR  
&  
4th ANNUAL COMMONWEALTH OF KENTUCKY EMERGENCY MEDICAL SERVICES CONFERENCE

JUNE 6-7, 1979

Ramada Inn/Bluegrass Convention Center  
Louisville

CHANGE IN LOCATION! →

Name \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Place of Employment \_\_\_\_\_

Please register me as follows: June 6, 1979-----\$15 ☐  
June 7, 1979-----\$15 ☐

Total Amount Enclosed----\$ \_\_\_\_\_

(registration fees include lunch, materials, coffee breaks,  
entrance to exhibits, etc.)

-----  
/Cardiopulmonary Resuscitation Courses/

Basic Life Support - Starts on Wednesday afternoon, June 6, and continues beginning on Thursday afternoon, June 7. You must attend both afternoons in order to be certified. (Fee is included in registration fees for June 6 & 7.) Limited registration - first applicants only will be accepted.....☐

Recertification in Basic Life Support - Thursday afternoon, June 7. (Fee for this course is included in the registration fee.) Limited registration. This is only for those who have already been certified by the Red Cross. FOR THOSE WHO WERE TOLD PREVIOUSLY THAT THEY ARE CERTIFIED FOR THREE YEARS: The Red Cross now requires that those who are certified by the Red Cross be recertified every year.....☐

-----  
Please return this form, with check or money order, payable to KMA, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205, Attention: Mrs. Wayne. Payment must accompany this registration form in order to assure proper registration. No refunds will be issued after June 1.



9th Annual KMA EMERGENCY MEDICAL CARE SEMINAR  
&  
4th Annual COMMONWEALTH OF KENTUCKY  
EMERGENCY MEDICAL SERVICES CONFERENCE

June 6-7, 1979

Ramada Inn/Bluegrass Convention Center

CHANGE IN  
LOCATION!



Wednesday, June 6

Morning Session

Theme: *"Cardiac Arrest and Arrhythmias"*

- 8:00 a.m. Registration  
8:40 a.m. Welcome and Orientation  
9:00 a.m. *"In the Field"* Randall Herron, Campbellsville  
9:20 a.m. *"In the Emergency Department"* George R. Braen, M.D., Lexington  
9:40 a.m. *"In the Cardiac Care Unit"* (speaker to be announced)  
10:00 a.m. Coffee Break

Theme: *"Field, Emergency Room, Coronary Care Unit Problems"*

- 10:20 a.m. *"Precordial Thump"* Don Rountree, Bowling Green  
10:40 a.m. *"Myocardial Infarctions — Complications and Treatment Programs"*  
Brian M. Kennelly, M.D., Louisville  
11:00 a.m. *"Cardiac Decompensation"* (speaker to be announced)  
12:00 noon Luncheon — *"Dispelling Some Fears About MAST"*  
Kimbal I. Maull, M.D., Richmond, Va.

Afternoon Session

- 1:30 p.m. Basic CPR Course — *see details on registration form*

Theme: *"Cranial Cerebral Emergencies"*

- 2:00 p.m. *"Neurologic Monitoring and Flow Sheet in the Field, Emergency Room and Intensive Care Unit"* Andrievs J. Dzenitis, M.D., Louisville  
2:20 p.m. *"The Role of Hypoxia in Closed Head Injuries"* (speaker to be announced)  
2:40 p.m. *"Immediate Care of Open Head Injuries"* (speaker to be announced)  
3:00 p.m. Intermission  
3:20 p.m. *"Alcoholism and Delirium"* Nelson B. Rue, M.D., Bowling Green  
3:40 p.m. *"Management of the Acutely Poisoned Patient"*  
Lawrence J. Guzzardi, M.D., Lexington  
3:00-6:00 p.m. 4th Annual Ambulance Competition

Thursday, June 7

Morning Session

Theme: "*Respiratory Problems*"

- 8:00 a.m. Registration
- 8:45 a.m. Opening Remarks
- 9:00 a.m. "*Hemo and Pneumo Thorax*" Bennett L. Crowder II, M.D., Hopkinsville
- 9:20 a.m. "*Flail Chest Injuries and Pulmonary Contusions*"  
J. David Richardson, M.D., Louisville
- 9:40 a.m. "*Ruptured Aorta*" Hal E. Houston, Jr., M.D., Murray
- 10:00 a.m. Coffee Break
- 10:20 a.m. "*Adult Respiratory Distress Syndrome*" Robert L. Hast, M.D., Owensboro
- 10:40 a.m. "*Pulmonary Shunts*" Donald M. Thomas, M.D., Louisville
- 11:00 a.m. "*The Role of Arterial Blood Gases in Evaluation*"  
Richard A. Mitchell, M.D., Louisville
- 11:20 a.m. "*Drowning*" (speaker to be announced)
- 12:00 noon Luncheon — *(topic to be announced)*  
James O. Page, J.D., Basking Ridge, N.J.

Afternoon Session

- 1:30-5:30 p.m. Red Cross CPR Workshops  
Basic Life Support (continued from Wednesday)  
Recertification (only for those who were previously certified by the Red Cross)
- 2:00-5:00 p.m. \* **Special Interest Meetings** — *sponsored by:*  
Kentucky EMS Coordinators Association  
Kentuckiana Chapter, Emergency Department Nurses Association  
Kentucky Chapter, American College of Emergency Physicians  
Kentucky Emergency Medical Technicians Association, Inc.
- \* *These special interest meetings are open to anyone who is interested in attending.*

# GONORRHEA

## CDC Recommended Treatment Schedules, 1978

### UNCOMPLICATED GONOCOCCAL INFECTIONS IN MEN AND WOMEN

#### Drugs Regimens of Choice

Aqueous procaine penicillin G (APPG) 4.8 million units injected intramuscularly at two sites, with 1.0 g of probenecid by mouth.

or

Tetracycline hydrochloride\* 0.5 g by mouth 4 time a day for 5 days (total dosage 10.0 g). Other tetracyclines are not more effective than tetracycline hydrochloride. All tetracyclines are ineffective as a single-dose therapy.

or

Ampicillin 3.5 g, or amoxicillin 3.0 g, either with 1 g probenecid by mouth. Evidence shows that the regimens are slightly less effective than the other recommended regimens.

Patients who are allergic to the penicillins or probenecid should be treated with oral tetracycline as above. Patients who cannot tolerate tetracycline may be treated with spectinomycin hydrochloride 2.0 g in one intramuscular injection.

#### Special Considerations

- Single-dose treatment is preferred in patients who are unlikely to complete the multiple-dose tetracycline regimen.
- The APPG regimen is preferred in men with anorectal infection.
- Pharyngeal infection is difficult to treat; high failure rates have been reported with ampicillin and spectinomycin.
- Tetracycline treatment results in fewer cases of postgonococcal urethritis in men.
- Tetracycline may eliminate coexisting chlamydial infections in men and women.
- Patients with incubating syphilis (seronegative, without clinical signs of syphilis) are likely to be cured by all the above regimens except spectinomycin. All patients should have a serological test for syphilis at the time of diagnosis.
- Patients with gonorrhea who also have syphilis or are established contacts to syphilis should be given additional treatment appropriate to the stage of syphilis.

Note: Physicians are cautioned to use no less than the recommended dosages of antibiotics.

\*Food and some dairy products interfere with absorption. Oral forms of tetracycline should be given 1 hour before or 2 hours after meals.

#### Treatment of Sexual Partners

Men and women exposed to gonorrhea should be examined, cultured and treated at once with one of the regimens above.

#### Followup

Followup cultures should be obtained from the infected site(s) 3-7 days after completion of treatment. Cultures should be obtained from the anal canal of all women who have been treated for gonorrhea.

#### Treatment Failures

The patient who fails therapy with penicillin, ampicillin, amoxicillin, or tetracycline should be treated with 2.0 g of spectinomycin intramuscularly.

Most recurrent infections after treatment with the recommended schedules are due to *reinfection* and indicate a need for improved contact tracing and patient education. Since infection by penicillinase ( $\beta$ -lactamase)-producing *Neisseria gonorrhoeae* is a cause of treatment failure, post-treatment isolates should be tested for penicillinase production.

#### Not Recommended

Although long-acting forms of penicillin (such as benzathine penicillin G) are effective in syphilotherapy, they have NO place in the treatment of gonorrhea. Oral penicillin preparations such as penicillin V are not recommended for the treatment of gonococcal infection.

#### PENICILLINASE-PRODUCING *NEISSERIA GONORRHOEAE* (PPNG)

Patients with uncomplicated PPNG infections and their sexual contacts should receive spectinomycin 2.0 g intramuscularly in a single injection. Because gonococci are very rarely resistant to spectinomycin and reinfection is the most common cause of treatment failure, patients with positive cultures after spectinomycin therapy should be re-treated with the same dose.

A PPNG isolate that is resistant to spectinomycin may be treated with cefoxitin 2.0 g in a single intramuscular injection, with probenecid 1.0 g by mouth.

#### TREATMENT IN PREGNANCY

All pregnant women should have endocervical cultures for gonococci as an integral part of the prenatal care at the time of the first visit. A



second culture late in the third trimester should be obtained from women at high risk for gonococcal infection.

Drug regimens of choice are APPG, ampicillin or amoxicillin, each with probenecid as described above.

Women who are allergic to penicillin or probenecid should be treated with spectinomycin.

Refer to the sections on acute salpingitis and disseminated gonococcal infections for the treatment of these conditions during pregnancy. Tetracycline should not be used in pregnant women because of potential toxic effects for mother and fetus.

### ACUTE SALPINGITIS (PELVIC INFLAMMATORY DISEASE)

There are no reliable clinical criteria on which to distinguish gonococcal from nongonococcal salpingitis. Endocervical cultures for *N. gonorrhoeae* are essential. Therapy should be initiated immediately.

A. Hospitalization should be strongly considered in these situations.

1. Uncertain diagnosis, in which surgical emergencies such as appendicitis and ectopic pregnancy must be excluded.
2. Suspicion of pelvic abscess.
3. Severely ill patients.
4. Pregnancy.
5. Inability of the patient to follow or tolerate an outpatient regimen.
6. Failure to respond to outpatient therapy.

### B. Antimicrobial Agents

#### Outpatients

Tetracycline\* 0.5 g taken orally 4 times a day for 10 days. This regimen should not be used for pregnant patients.

or

APPG 4.8 million units intramuscularly, ampicillin 3.5 g or amoxicillin 3.0 g each with probenecid 1.0 g. Either regimen is followed by ampicillin 0.5 g or amoxicillin 0.5 g orally 4 times a day for 10 days.

#### Hospitalized patients

Aqueous crystalline penicillin G 20 million units given intravenously each day until improvement occurs, followed by ampicillin 0.5 g orally 4 times a day to complete 10 days of therapy.

or

Tetracycline\* 0.25 g given intravenously 4 times a day until improvement occurs, followed by 0.5 g orally 4 times a day to complete 10 days of therapy. This regimen should not be used for pregnant women. The dosage may have to be adjusted if renal function is depressed.

Since optimal therapy for hospitalized patients has not been established, other antibiotics in addition to penicillin are frequently used.

### C. Special Considerations

—Failure of the patient to improve on the recommended regimens does not indicate the need for stepwise additional antibiotics but requires clinical reassessment.

—The intrauterine device is a risk factor for the development of pelvic inflammatory disease. The effect of removing an intrauterine device on the response of acute salpingitis to antimicrobial therapy and on the risk of recurrent salpingitis is unknown.

—Adequate treatment of women with acute salpingitis must include examination and appropriate treatment of their sex partners because of their high prevalence of nonsymptomatic urethral infection. Failure to treat sex partners is a major cause of recurrent gonococcal salpingitis.

—Followup of patients with acute salpingitis is essential during and after treatment. All patients should be recultured for *N. gonorrhoeae* after treatment.

### ACUTE EPIDIDYMITIS

Acute epididymitis can be caused by *N. gonorrhoeae*, *Chlamydia* or other organisms. If gonococci are demonstrated by Gram stain or culture of urethral secretions, treatment should be:

APPG 4.8 million units, ampicillin 3.5 g or amoxicillin 3.0 g, each with probenecid 1.0 g. Either regimen is followed by ampicillin 0.5 g or amoxicillin 0.5 g orally 4 times a day for 10 days.

or

Tetracycline\* 0.5 g orally 4 times a day for 10 days.

If gonococci are not demonstrated, the above tetracycline regimen should be used.

### DISSEMINATED GONOCOCCAL INFECTION

A. Equally effective treatment schedules in the arthritis-dermatitis syndrome include:

Ampicillin 3.5 g or amoxicillin 3.0 g orally, each with probenecid 1.0 g, followed by ampicillin 0.5 g or amoxicillin 0.5 g 4 times a day orally for 7 days.

or

Tetracycline\* 0.5 g orally 4 times a day for 7 days. Tetracycline should not be used for complicated gonococcal infection in pregnant women.

or

Spectinomycin 2.0 g intramuscularly twice a day for 3 days (treatment of choice for disseminated infection caused by PPNG).

or

Erythromycin 0.5 g orally 4 times a day for 7 days.

or

Aqueous crystalline penicillin G 10 million units intravenously per day until improvement occurs, followed by ampicillin 0.5 g 4 times a day to complete 7 days of antibiotic treatment.

#### B. Special Considerations

- Hospitalization is indicated in patients who may be unreliable, have uncertain diagnosis, or have purulent joint effusions or other complications.
- Open drainage of joints other than the hip is not indicated.
- Intra-articular injection of antibiotics is unnecessary.

C. Meningitis and endocarditis caused by the gonococcus require high-dose intravenous penicillin therapy. In penicillin-allergic patients with endocarditis, desensitization and administration of penicillin is indicated; chloramphenicol may be used in penicillin-allergic patients with meningitis.

### GONOCOCCAL INFECTIONS IN PEDIATRIC PATIENTS

With gonococcal infections in children beyond the newborn period the possibility of sexual abuse must be considered. Genital, anal and pharyngeal cultures should be obtained from all patients before antibiotic treatment. Appropriate cultures should be obtained from individuals who have had contact with the child.

### PREVENTION OF GONOCOCCAL OPHTHALMIA

When required by State legislation or indicated by local epidemiologic considerations, effective and acceptable regimens for prophylaxis of neonatal gonococcal ophthalmia include:

Ophthalmic ointment or drops containing tetracycline or erythromycin.

or

One percent silver nitrate solution.

#### Special Considerations

- Bacitracin is not recommended.
- The value of irrigation after application of silver nitrate is unknown.

### MANAGEMENT OF INFANTS BORN TO MOTHERS WITH GONOCOCCAL INFECTION

The infant born to a mother with gonorrhea is at high risk of infection and requires treatment with a single intravenous or intramuscular injection of aqueous crystalline penicillin G 50,000 units to full-term infants or 20,000 units to low-birth-weight infants. Topical prophylaxis for neonatal ophthalmia is not adequate treatment. Clinical illness requires additional treatment.

#### NEONATAL DISEASE

- A. Gonococcal Ophthalmia: Patients should be hospitalized and isolated for 24 hours after initiation of treatment. Untreated gonococcal ophthalmia is highly contagious. Aqueous crystalline penicillin G 50,000 units/kg/day in 2 doses intravenously should be administered for 7 days. Saline irrigation of the eyes should be performed as needed. Topical antibiotic preparations alone are not sufficient or required when appropriate systemic antibiotic therapy is given.
- B. Complicated infections: Patients with arthritis and septicemia should be hospitalized and treated with aqueous crystalline penicillin G 75,000 to 100,000 units/kg/day intravenously in 2 or 3 divided doses for 7 days. Meningitis should be treated with aqueous crystalline penicillin G 100,000 units/kg/day, divided into 3 or 4 intravenous doses, and continued for at least 10 days.

#### CHILDHOOD DISEASE

Children who weigh 100 lbs. (45 kg) or more should receive adult regimens. Children who weigh less than 100 lbs. should be treated as follows:

##### Uncomplicated Disease

Uncomplicated vulvovaginitis, urethritis, proctitis or pharyngitis can be treated at one visit with:

Amoxicillin 50 mg/kg orally with probenecid 25 mg/kg (maximum 1.0 g).

or

Aqueous procaine penicillin G 100,000 units/kg intramuscularly plus probenecid 25 mg/kg (maximum 1.0 g).

##### Special Considerations

- Topical and/or systemic estrogen therapy are of no benefit in vulvovaginitis.
- Long-acting penicillins, such as benzathine penicillin G, are not effective.
- All patients should have followup cultures and the source of infection should be identified, examined and treated.

##### Gonococcal Ophthalmia

Ophthalmia in children is treated as in neonates but the dose of penicillin is increased to 100,000 units/kg/day intravenously.

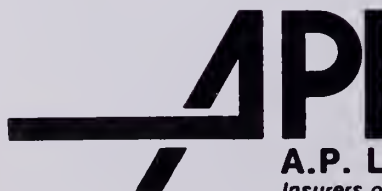
(Continued on page 192)

# PEANUTS & ELEPHANTS

Those of you who pay your disability premiums out of your corporation save only "peanuts" on your annual taxes and could pay "elephantine" taxes in the event you should be disabled for a long period—or permanently.

We recommend that you pay your premiums out of your personal account so you will own your dollars.

## *KENTUCKY MEDICAL ASSOCIATION DISABILITY INSURANCE PROGRAM*



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# Dyazide<sup>®</sup>

Each capsule contains 50 mg. of Dyrenium<sup>®</sup> (brand of triamterene) and 25 mg. of hydrochlorothiazide.

## Makes Sense in Hypertension<sup>\*</sup>

Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

**\* Warning**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spiro-nolactone is used concomitantly, determine serum K<sup>+</sup> frequently; both can cause K<sup>+</sup> retention and elevated serum K<sup>+</sup>. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

**SK&F CO.**  
a SmithKline company

Carolina, P.R. 00630



**When painful spasm  
is the presenting  
symptom...**



...in the functional bowel/irritable bowel syndrome\*

# Bentyl®

## (dicyclomine hydrochloride USP)

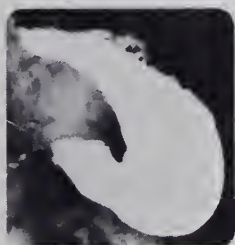
10 mg. capsules, 20 mg. tablets,  
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity  
with minimal anticholinergic side effects†

### Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

\*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

# Merrell



# Bentyl<sup>®</sup>

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

## INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FOA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage, severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage:** Bentyl 10 mg. capsule and syrup. Adults: 1 or 2 capsules or teaspoonfuls syrup three or four times daily. Children: 1 capsule or teaspoonful syrup three or four times daily. Infants: ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: Adults: 1 tablet three or four times daily. Bentyl Injection: Adults: 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>®</sup> (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

## Malpractice Dilemma

(Continued from page 206)

either adjusted rates, increased limits offered or altered partnership/corporation charges. One major carrier who recently raised rates substantially in a neighboring state where there is no physician-owned company did not do the same in Kentucky. Experts in the field indicate that the existence of KMIC was the inhibiting factor.

It is clear that by taking over their professional insurance concerns, doctors in Kentucky, Ohio and elsewhere have dramatically influenced this market for the benefit of the whole medical profession.

## Treatment Schedules

(Continued from page 187)

### Complicated Infections

Patients with peritonitis or arthritis require hospitalization and treatment with aqueous crystalline penicillin G, 100,000 units/kg/day intravenously for 7 days. Aqueous crystalline penicillin G 250,000 units/kg/day intravenously in 6 divided doses for at least 10 days is recommended for meningitis.

### Allergy to Penicillin

Children who are allergic to penicillin should be treated with spectinomycin 40 mg/kg intramuscularly. Children older than 8 years may be treated with tetracycline 40 mg/kg/day orally in 4 divided doses for 5 days. For treatment of complicated disease, the alternative regimens recommended for adults may be used in appropriate pediatric dosages.

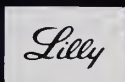
# Merrell

MERRELL-NATIONAL LABORATORIES  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215, U.S.A.

**contains no aspirin**

tablets  
**Darvocet-N<sup>®</sup> 100** (IV)

100 mg. Darvon-N<sup>®</sup> (propoxyphene napsylate)  
650 mg. acetaminophen



700565

*Additional information available  
to the profession on request from  
Eli Lilly and Company  
Indianapolis, Indiana 46206*

Eli Lilly and Company, Inc.  
Carolina, Puerto Rico 00630

Provided by the Kentucky Chapter, American College of Surgeons at the request of the KMA Continuing Education Committee

## **Surgical Management of Cardiogenic Shock**

CARDIOGENIC shock has been defined as a state of "acute circulatory insufficiency characterized by a cardiac output inadequate to provide normal perfusion for the major organs."<sup>1</sup> Clinically, cardiogenic shock is characterized by a decrease in systolic pressure to less than 90 mmHg or a persistent decrease of 30 mmHg less than the usual basal level of blood pressure, associated with a metabolic acidosis indicating inadequate tissue perfusion. Mental confusion, cyanosis of the extremities, and sweating are commonly present. Urine output is decreased to less than 30 ml per hour for at least two consecutive hours.<sup>2</sup> Hypovolemia should be considered and specifically excluded.

Previous reviews have shown that 10% to 15% of those patients who were admitted to the hospital for acute myocardial infarction will develop cardiogenic shock. The mortality with medical management of cardiogenic shock has remained at approximately 90% in most series.<sup>3</sup>

Recently, a surgical approach to the management of patients with cardiogenic shock has been advocated. This approach is the topic with which this report deals.

### **Intra-Aortic Balloon Pump**

The intra-aortic balloon pump is a device in which a balloon mounted on a catheter is inserted under local anesthesia through the femoral artery into the thoracic aorta. The balloon is timed to deflate during systole, decreasing the systolic arterial pressure, thus decreasing myocardial afterload, and to inflate during cardiac diastole, maximizing diastolic coronary perfusion pressure. The device has been shown to decrease left ventricular work, reduce myocardial oxygen consumption, augment coronary blood flow and to increase systemic cardiac output in the presence of a failing ischemic ventricle.<sup>4</sup>

The intra-aortic balloon pump causes a significant decrease in systolic arterial pressure and an

increase in diastolic pressure, cardiac output and urinary output. The signs of shock are resolved in 75% of the patients.<sup>5</sup>

Despite the excellent improvement in hemodynamics, the intra-aortic balloon pump by itself has caused little improvement in later survival. Dunkman and co-workers reported that seven of 40 (17%) patients survived cardiogenic shock with the intra-aortic balloon pump support alone, but three of the seven who initially survived died with recurrent myocardial infarction within one year.<sup>5</sup> Others have noted even higher mortality rates in patients treated medically after intra-aortic balloon pumping.<sup>7</sup> Based on these observations, it has been suggested that surgery is not indicated urgently in patients who stabilize on the intra-aortic balloon pump and later become balloon-independent, but that it definitely should be undertaken after an interval of four to six weeks if the anatomy is favorable.<sup>6</sup> The anatomy is considered to be favorable if the patient has obstructed coronary vessels which can be surgically bypassed and adequate residual left ventricular function to allow operation. In patients who deteriorate hemodynamically when the intra-aortic balloon pump is stopped, emergency angiography is carried out with an acceptable risk, while continuing balloon assist. In one series, 77 patients who were intra-aortic balloon pump-dependent underwent angiographic study without a mortality related to the study.<sup>7</sup> Similar results have been obtained in our laboratory, although the number of patients studied is less. In those patients who are balloon-dependent and at angiography are found to have bypassable vessels, emergency surgery has been advocated.

### **Surgical Management**

Cardiogenic shock which develops after an acute myocardial infarction may be associated (a) with pure heart pump failure secondary to extensive myocardial necrosis and ischemia (b) with an acute ventricular septal defect, or (c)



with papillary muscle rupture. In those patients who develop cardiogenic shock on the basis of pure cardiac power failure, the hope in utilizing the intra-aortic balloon pump is to stabilize perfusion to the peri-infarction ischemic zone. Emergency coronary artery bypass is carried out to improve the blood supply to this ischemic zone and resection of dead cardiac muscle, i.e., infarctectomy, is occasionally necessary to remove a paradoxically bulging infarct, or thin area, where rupture appears imminent. Surgical management in this group of patients with favorable anatomy has allowed salvage of as many as 50%.

In those patients who develop a ventricular septal defect after an acute myocardial infarction, the outlook without surgical therapy has been dismal, as 87% will die within the first two months after recognition.<sup>8</sup> With newer surgical techniques and early surgical intervention, including closure of the ventricular septal defect, infarctectomy and coronary revascularization, a 40% survival has been reported.<sup>9</sup> Similar results have been obtained in our limited experience with this defect. Three of five have survived surgery, with one late death from sepsis after cholecystectomy for gangrenous cholecystitis.

Papillary muscle rupture after myocardial infarction is most commonly associated with an inferoposterior infarct. The mortality of this complication has been reported to be 70% within 24 hours and 90% within two weeks after the new murmur has been noted.<sup>10</sup> Insertion of the intra-aortic balloon pump, immediate catheterization, surgical replacement of the mitral valve, and myocardial revascularization are indicated. A survival rate approximately 40%<sup>6</sup> has been reported. Although the numbers are small and further data will be necessary to fully evaluate the results, it appears that results of this approach are superior to results of previous approaches.

### Summary

The outlook for patients who develop cardiogenic shock after an acute myocardial infarct

has been dismal. Approximately 90% of these patients expire despite maximum medical management. With the ready availability of coronary artery revascularization and the intra-aortic balloon pump for stabilization of the patients, the outlook appears to be improved. The suggested management in this type of patient now includes (a) the usual supportive measures, (b) insertion of the intra-aortic balloon pump, (c) determination of the need for continued balloon support, (d) coronary angiography, and (e) correction of mechanical defects and coronary revascularization in those patients who are operative candidates. Further evaluation will be necessary to determine the full impact of this new management on the mortality of cardiogenic shock.

EDWARD P. TODD, M.D., Ph.D.

Division of Cardiothoracic Surgery

University of Kentucky Medical Center  
Lexington, Kentucky

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Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.

# Inside The Medical Licensure Board



**Kentucky State Board of Medical Licensure  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205**

**D**URING the last years of operation, among other things, the State Board of Medical Licensure has come to the realization that most of the physicians who appear before the Board for disciplinary cause have very little knowledge concerning the statutes governing the practice of medicine in the Commonwealth of Kentucky, and virtually no knowledge of the composition and operation of the Board. In order to remedy this situation, and in order to effectuate a better working relationship between the Board and the physicians holding licenses to practice in the Commonwealth of Kentucky, the Board has initiated the concept to publish articles in **The Journal** concerning such topics as: discussions of selected provisions of the Kentucky Medical and Osteopathic Practice Act of 1972 (as amended June, 1978), reports of the results of disciplinary proceedings before the Board, discussions of specific concerns of the Board, and the practicing community such as the utilization of physicians assistants, discussions of pending legislation that affects the medical community, and the responses to questions submitted to the Board which are of interest to the general medical community.

This initial article has two concerns; first, to alert the reader to begin to look for these articles in *The Journal*, both as a matter of interest and as a vehicle with which to expand his knowledge

with regard to his responsibilities as a license holder; and second, to convey to the reader a basic understanding of the Board, its makeup and its operation.

By statute, the Board is made up of seven voting members, six practicing physicians throughout the State, one of these being a licensed osteopathic physician, and the seventh voting member, a citizen at large who is not associated with, or financially interested in, the practice or business of medicine. Also included in the Board's makeup are the ex-officio members; those being the Deans of the University of Kentucky, the University of Louisville Medical Schools and the Secretary of the Department for Human Resources, or his designee.

By declared legislative intent, the function of the Board is described as "to regulate and control the practice of medicine and osteopathy as provided in KRS 311.550 to 311.620, in order to prevent empiricism and to protect the health and safety of the public." In order to meet this thrust, the most important function the Board performs is to regulate and control the manner in which physicians are admitted to practice medicine in the Commonwealth of Kentucky, and to discipline those errant physicians who have been so licensed. For many years, the regulation of the practice of medicine was done on an informal basis with varied results. Over the past five years, the Board has grown more active and far reaching due to a number of reasons, among which are: the growing awareness of the patient consumer; the astronomical growth of malpractice and a dramatic



increase of malpractice insurance; and most importantly, the intrusion of the Federal Government into the regulations of medicine. For years, the abuses and deficiencies of the practice of medicine in Kentucky had virtually gone unrestrained, and a good deal of the Board's activism can be attributed to a growing awareness of the problems in the medical community and a desire to take care of the profession without the added burden of federal intervention which has had, in many cases, the effect of creating more problems than it has solved.

As evidence of this commitment by the Board to meet the varied problems involved in regulating and controlling the practice of medicine and osteopathy in the Commonwealth, the Board caused the majority of KRS Chapter 311 to be re-written. The changes are of no small magnitude, and when one reads the new provisions, it is apparent that the majority of the amendments were made to allow the Board to operate more efficiently and more forcefully.

One such area in the new amendments has to do with the defining of what constitutes "dishonorable, unethical or unprofessional conduct of a character likely to deceive, defraud or harm the public or a member thereof." Traditionally, this blanket condemnation of unacceptable conduct has been used to address any number of undesirable situations. Recently, the Kentucky Judiciary stated, in a Board case before it, that such a broad definition/description was not sufficient to appraise the concerned physician of what was acceptable or unacceptable conduct, and contained the potential for abuse in that the Board was placed in the position of judging what was acceptable conduct only after the act had been committed by the physician. Therefore, the new section KRS 311.597 attempts to appraise the physician in some better measure as to what constitutes unacceptable conduct.

KRS 311.597 addresses itself to four main areas with regard to "dishonest, unprofessional or unethical conduct." This article will cover the first of these areas, that area dealing with the problem of drug abuse.

"In the prescribing or dispensing of *controlled substances* it is deemed to be unacceptable conduct when":

(a) "It is done with the *intent* or *knowledge* that a controlled substance *will* be used or is *likely* to be used other than medically or for an accepted therapeutic purpose";

This is aimed at a better control on the usage and/or abuse of controlled substances by "patients," as he may be aided knowingly or unknowingly by a physician. Obviously, a physician should never cause a patient to become addicted to drugs. However, over the years the Board has encountered many cases where it was presented that a patient was receiving an inordinate amount of a controlled substance over a long period of time and the physician defended the situation by asserting that he was not aware of exactly how much and how often the patient was getting prescriptions from him. The above section should be read with this following section:

(b) "In such amounts that the licensee knows or has reason to know, under the attendant circumstances, that said amounts so prescribed or dispensed are excessive under accepted and prevailing medical practice standards."

One of societies biggest problems is drug abuse, and sadly enough, an amazing amount of drugs that make their way into the drug culture are obtained directly from a doctor's office. The two sections as stated above are designed to shut down this avenue for controlled substances by two methods. First, hopefully, the licensed physician will take heed of these new sections and begin to rigidly police his own prescribing and dispensing methods, certainly in terms as to whom, how often, and how much; secondly, if the concerned physician cannot effectively deal with this problem, the Board will step into the situation, review the problem, and determine how such a licensee should be disciplined, up to and including revocation of license;

(c) "For the licensee's personal use or for the use of his immediate family when the licensee knows or has reason to know that an abuse of a controlled substance is occurring, or may result from such practice." The Board has reviewed more than a few cases wherein a doctor and/or his immediate family were abusing a controlled substance. Almost to the case, the concerned physician described this thought process: "I'm a doctor, I know what drugs can do, I know my physical condition, I know I can handle the situation," of course, the last phrase had to do with his amazement or confusion over how he could have possibly become addicted. Hopefully, this section will help relieve the temptation and/or the pressure from the family member who needs a little extra help. It should be pointed out that this



section does not cover an emergency situation where the doctor must render aid until regular treatment is available; and

(d) "With the intent to evade any law with respect to sale, use or disposition of such controlled substances." This section is self-explanatory and sadly enough, there has been more than one situation where this type of conduct has occurred.

In succeeding articles, the remaining parts of the definition for "unethical, unprofessional and dishonest conduct" will be explored.

Finally, the Board would point out another new feature of the law, that being KRS 311.602, wherein the physician may request a written opinion of the Board regarding any proposed conduct he may be considering, or question any part of the statutes or regulations that are unclear to him. The Board encourages such written questions and requests not only in order to assist the individual physician, but also the medical community as a whole in that such a request may prove to be interesting material for future articles. All such requests or questions should be directed to the Kentucky State Board of Medical Licensure, 3532 Ephraim McDowell Drive, Louisville, Kentucky.

The purpose of the operation of the State Board of Medical Licensure is to discharge its public trust in that it seeks to protect the patient and the general public at large, and in so doing it seeks to serve and assist the physician in not only aiding the physician with existing problems within the area of licensure, but also to educate and forewarn the physician so that he or she may avoid any problems with licensure. All questions and comments are welcomed.

# Librax®

Each capsule contains 5 mg  
chlordiazepoxide HCl and 2.5 mg clidinium Br.

**Please consult complete prescribing information, a summary of which follows:**

**Indications:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

"Possibly" effective: as adjunctive therapy in the treatment of peptic ulcer and in the treatment of the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

Final classification of the less-than-effective indications requires further investigation.

**Contraindications:** Glaucoma; prostatic hypertrophy, benign bladder neck obstruction; hypersensitivity to chlordiazepoxide HCl and/or clidinium Br.

**Warnings:** Caution patients about possible combined effects with alcohol and other CNS depressants, and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Physical and psychological dependence rarely reported on recommended doses, but use caution in administering Librium® (chlordiazepoxide HCl) to known addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions) reported following discontinuation of the drug.

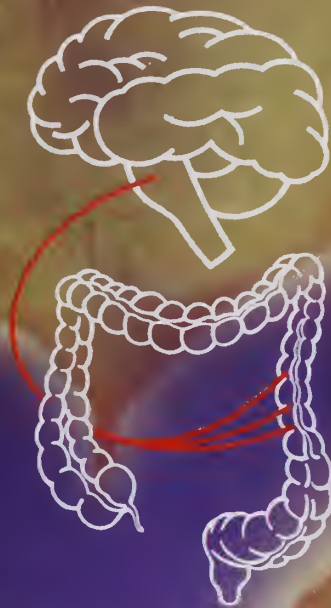
**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy. Advise patients to discuss therapy if they intend to or do become pregnant.

As with all anticholinergics, inhibition of lactation may occur.

**Precautions:** In elderly and debilitated, limit dosage to smallest effective amount to preclude ataxia, oversedation, confusion (no more than 2 capsules/day initially; increase gradually as needed and tolerated). Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider pharmacology of agents, particularly potentiating drugs such as MAO inhibitors, phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions reported in psychiatric patients. Employ usual precautions in treating anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship not established.

**Adverse Reactions:** No side effects or manifestations not seen with either compound alone reported with Librax. When chlordiazepoxide HCl is used alone, drowsiness, ataxia, confusion may occur, especially in elderly and debilitated; avoidable in most cases by proper dosage adjustment, but also occasionally observed at lower dosage ranges. Syncope reported in a few instances. Also encountered: isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent, generally controlled with dosage reduction; changes in EEG patterns may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice, hepatic dysfunction reported occasionally with chlordiazepoxide HCl, making periodic blood counts and liver function tests advisable during protracted therapy. Adverse effects reported with Librax typical of anticholinergic agents, i.e., dryness of mouth, blurring of vision, urinary hesitancy, constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diets.





In treating irritable bowel syndrome\*  
Enhance your therapeutic expectations  
with

# Librax<sup>®</sup>

Each capsule contains  
5 mg chlordiazepoxide HCl  
and 2.5 mg clidinium Br.

**antianxiety/antispasmodic/antimotility**

Librax is unique among G.I. medications in providing the specific antianxiety action of LIBRIUM<sup>®</sup> (chlordiazepoxide HCl) as well as the potent antispasmodic and antimotility actions of QUARZAN<sup>®</sup> (clidinium Br) for adjunctive therapy of irritable bowel syndrome.



\*Librax has been evaluated as possibly effective for this indication.  
Please see brief summary of prescribing information on preceding page.





## The evidence of experience

Since October 1974 when Motrin® (ibuprofen) was introduced in the United States, it has been used by more than 6,000,000 patients with rheumatoid arthritis\* or osteoarthritis. Rarely has an ethical pharmaceutical product been prescribed for so many patients in so short a time. In addition, more than 450 studies presenting new data related to Motrin have been published.

The 6,000,000 patients already treated with Motrin is an objective measure of physicians' confidence in the ability of Motrin to relieve the pain and inflammation associated with rheumatoid arthritis and osteoarthritis.

So it is not surprising that in this short period Motrin has become the most frequently prescribed alternative to aspirin. Motrin relieves joint pain and inflammation as effectively as indomethacin or aspirin, but causes significantly fewer CNS and milder GI reactions.

However, gastrointestinal bleeding, sometimes severe, has been associated with Motrin, aspirin, indomethacin, and other nonsteroidal antiarthritic agents.

\*The safety and effectiveness of Motrin have not been established in patients with Functional Class IV rheumatoid arthritis (incapacitated, largely or wholly bedridden, or confined to wheelchair; little or no self-care).





# Motrin<sup>®</sup> 400 mg TABLETS

ibuprofen, Upjohn

The confidence that comes from experience—  
one more reason to prescribe Motrin.

Please turn page for a brief summary of prescribing information.

**Upjohn**

The Upjohn Company, Kalamazoo, Michigan 49001



The confidence that comes from experience—  
one more reason to prescribe

# Motrin<sup>®</sup> 400 mg TABLETS

ibuprofen, Upjohn

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** Aspirin used concomitantly may decrease Motrin blood levels. Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

## Adverse Reactions

### Incidence greater than 1%

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin (ibuprofen) is gastrointestinal (4% to 16%). This includes nausea\*, epigastric pain\*, heartburn\*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness\*, headache, nervousness. **Dermatologic:** Rash\* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence: Unmarked 1% to 3%; \*3% to 9%.

### Incidence less than 1 in 100

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

### Causal relationship unknown

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Suggested dosage is 300 or 400 mg t.i.d. or q.i.d. Do not exceed 2400 mg per day.

## How Supplied

### Motrin Tablets, 300 mg (white)

Bottles of 60

NDC 0009-0733-01

Bottles of 500

NDC 0009-0733-02

### Motrin Tablets, 400 mg (orange)

Bottles of 60

NDC 0009-0750-01

Bottles of 500

NDC 0009-0750-02

Unit-dose package of 100

NDC 0009-0750-06

Unit of Use bottles of 120

NDC 0009-0750-26

Caution: Federal law prohibits dispensing without prescription.

NIM-3

Upjohn

The Upjohn Company  
Kalamazoo, Michigan 49001



MSD  
MERCK  
SHARP  
DOHME

**ALDOMET<sup>®</sup>**  
**(METHYLDOPA/MSD)**

TABLETS: 500 mg, 250 mg, and 125 mg

# When the indications surface...

Net wt 1 oz

Net wt 1/2 oz

Net wt 1/32 oz (approx)



# NEOSPORIN<sup>®</sup> Ointment

(Polymyxin B-Bacitracin-Neomycin)



Burroughs Wellcome Co.  
Research Triangle Park  
North Carolina 27709

Each gram contains: Aerosporin<sup>®</sup> (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

**INDICATIONS:** *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, cosmes vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the

ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



LEARN ALL THE FACTS (AND ADVANTAGES!) ABOUT  
THE PURCHASE OF LAND IN  
**THE WONDERFUL "NO-NO" WORLD  
OF SAN SALVADOR ISLAND**  
IN THE BEAUTIFUL SUN-BLESSED BAHAMAS

In the Bahamas there is:

**NO** Pollution

**NO** Crowds

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## EDITORIAL

### K M I C

**T**HE formation by the KMA Board of Trustees of the Kentucky Medical Insurance Company (KMIC) is an exciting event showing foresight and ambitious imagination and that the KMA is helping the membership keep control of its destiny. We feel it deserves the support and help of the membership. The company has been created with careful, intelligent and enthusiastic leadership.

In the short time since Rily Lassiter has served as the company's executive vice president, his energetic communication with members throughout the state has increased our awareness of the importance of KMIC to us. His article in this issue of *The Journal* details the factors that make KMIC a secure company to insure with and invest in.

Naturally, the company wishes an early and healthy expansion of policyholders and this is essential to the foundation and success of KMIC.

But this goal should not be confused with the first and more urgent need of the company to reach capitalization. The company shows every promise of becoming a sound and reliable insurer. For this reason, we feel that buying stock in the company is an intelligent investment.

There may be members who feel loyal to their insurance companies and who are happier continuing a satisfactory relationship with those companies. They can see that this should not dissuade them from making a sound investment by buying stock in KMIC.

Capitalization of KMIC is the urgent necessity now for success in the future. Your participation through investment now will be a comfort in the future. We've already learned that the lack—or prospect of lack of insurance—is devastating.

Now, you can have a friend in the insurance business.

AEO

# Malpractice Dilemma Unites Physicians

Riley Lassiter

**M**OST Kentucky physicians remember all too clearly the medical professional liability insurance "crisis" in the mid-seventies, when most commercial carriers either dramatically increased their rates, limited the types of coverage offered, or withdrew from the market altogether. Many doctors are also aware that the relative stability of the current environment in that market may be misleading, since experts predict another period of difficulty in the early 1980's.

The nationwide response of physicians to the situation has been to resist the control of commercial carriers by forming their own malpractice insurance companies. In Kentucky, the Kentucky Medical Association has organized the Kentucky Medical Insurance Company in just such a move.

There are approximately 45 physician-controlled companies in the United States now, 19 of which are sponsored by state and local medical societies. These figures are provided in a recent article in *Medical Economics* entitled, "Doctor-owned Malpractice Carriers: So Far, So Good" (December 11, 1978 issue). The article outlines the structure of some of these physician-owned companies, including their underwriting procedures, funding, determination of rates, and investment programs. The thrust of the article is that these companies are not only maintaining their stability in the market, but are now providing some serious competition for those same commercial carriers who controlled the 1974-1975 situation.

The Kentucky Medical Insurance Company (KMIC) has counterparts in New York, North Carolina, California, Florida, Illinois, Maryland, Michigan, Mississippi, Alabama, Pennsylvania, Tennessee, and of course, in Ohio with the Physicians Insurance Company of Ohio (PICO). For example, in California, the physician-controlled companies are receiving wide-spread support, with 50% of California physicians insured by them. The companies in the various states are widely diverse in organization, size, and coverages offered. Some offer exclusively occurrence or

claims-made policies, while others offer both. Several offer unique types of coverage designed to fulfill the needs of their physician owners. One California company, Mutual Protection Trust in Los Angeles, is not an insurance company but a non-profit risk pool. No policies are written, but physicians are covered for \$1,000,000 per occurrence with no annual limit. The physician owners pay membership dues and also any losses which exceed their fund's earnings. Most, like KMIC, are far more conservative in structure.

The prevailing attitude of many of the physician-controlled companies, particularly those sponsored by medical associations, favors the occurrence policy. These companies tend to be financially conservative and deeply committed to physician needs. And, as pointed out by *Medical Economics*, most are successful thus far. There are a variety of reasons this may be true, but one of the most obvious is the added competition they are providing in the market. In many areas, commercial carriers are now more hesitant to raise rates or alter coverages offered because of the existence of the physician-owned competition. Doctor-oriented insurers are determined to offer the lowest rates possible without jeopardizing company stability. In order to compete in many states, commercial carriers offering similar coverage can go no higher than the physician-owned company's rates.

North Carolina, for instance, now has the lowest medical professional liability insurance rates in the country. One reason may be the existence of the Medical Liability Mutual Insurance Company. The company was "created in a crisis" when the St. Paul Company suddenly withdrew from the market in that state. The St. Paul Company had previously insured 96% of the state's physicians. When the St. Paul Company decided to return to the North Carolina market, it found substantial competition in the physician-owned company, which now insures 65% of the state's private practitioners.

In Kentucky, a similar situation is occurring with the formation of KMIC. Since Kentucky doctors indicated their intention to form their own company, other major Kentucky carriers have

---

*Mr. Lassiter is Executive Vice President of the Kentucky Medical Insurance Company.*

*(Continued on page 192)*



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## ASSOCIATIONAL NEWS



### Fourth Trustee District Annual Meeting

Fourth Trustee District members and their spouses are invited to attend their Annual Meeting, April 18, 1979 at the Holiday Inn North, Elizabethtown, Kentucky.

A social hour at 6:30 p.m. will be followed by dinner and a program. Featured speakers are KMA President, Carl Cooper, Jr., M.D., and Mr. Riley Lassiter, executive vice president of the Kentucky Medical Insurance Company.

All members are urged to attend this important meeting. For more information, contact Charles B. Spalding, M.D., Trustee of the Fourth KMA District.

### Sir Rodney Smith To Address Kentucky Surgical Society

Sir Rodney Smith, Knight Commander of the British Empire and an authority on operation on the pancreas and bile ducts, will address the Kentucky Surgical Society during its Spring Meeting at Lake Barkley State Resort Park on May 24-27.

Knighted by Queen Elizabeth in 1976, Lord Rodney attended Westminster Medical School and took his surgical training at St. Thomas Hospital.

Following several years of service as captain of a combat surgical team during World War II, Lord Rodney was made a Consultant at St. George's Hospital in London, where he has performed nearly 1700 pancreas and bile duct operations.

Lord Rodney was president of the Royal College of Surgeons from 1973 to 1977 and is currently president of the Royal Society of Medicine, headquartered in London. He has been an honorary member of the American College of Surgeons since 1975.

### COST CUT CORNER

#### APRIL—Self Care Can Save Patient Dollars.

All of us know that we cannot control health costs that are the result of human carelessness or poor health habits. People eat too much, exercise too little, and indulge in other habits which may prove harmful to their wellbeing.

Consider using patient education materials on prevention and self care. Explain the importance of compliance with treatment regimens, diets and other procedures you prescribe.

### Infectious Diseases in Kentucky

The KMA Committee on Community and Rural Health recently reviewed the infectious disease rates in Kentucky, with special emphasis on the venereal diseases. While syphilis rates have declined to controllable numbers in Kentucky, gonorrhea has continued to increase at dramatic rates.

Since 1963, the number of gonorrhea cases in Kentucky has quadrupled, with over 11,000 cases reported in 1978. Reported cases are only the tip of the iceberg, however, and it is estimated that between five and ten times that many cases are present but go unnoticed or unreported. The Department for Health Education and Welfare, Center for Disease Control has just released an updated treatment schedule for complicated and uncomplicated gonorrhea. Rapid mutating of gonorrhea bacteria has made it more resistant to current antibiotic treatment; therefore, proper evaluation and followup of patients and their contacts must be maintained to insure that they are cured and protected from future re-exposure.

The treatment schedule located in this issue of *The Journal* is provided in the form of a tear-out which physicians may use for future reference.

### 20th Annual Ky. Occupational Medical Association Meeting

The 20th Annual Kentucky Occupational Medical Association Meeting will be held May 25, 1979, at the Hyatt Regency Hotel in Louisville.

Dedicated to the "care of employees in the work place," the meeting will include presentations by Morton Kasdan, M.D., a Louisville hand surgeon; Wilbur Mitchell, M.D., Louisville psychiatrist; and Glenn L. Schilling, Chairman of Kentucky Workman's Compensation Board.

The meeting will satisfy the criteria for six hours in Category I of the Physicians Recognition Award of the American Medical Association.

For further information, contact Gracie R. Rowntree, M.D., (502) 451-3844.

### KMA ANNUAL MEETING

September 24-27, 1979

Ramada Inn/Bluegrass  
Convention Center  
Louisville, Kentucky





## Headquarters Activity

### FEBRUARY

- 1 Physicians Health, Louisville
- Membership & Placement Services, Louisville
- 8th Trustee District, Covington
- 1-3 Occupational & Professional Licensing Conference, Frankfort
- 8 Paramedic Advisory Committee, Louisville
- 13 *Journal* Editors, Louisville
- 14 JCMS Ad Hoc Committee on AMA Membership, Louisville
- 15 AMA National Leadership Conference, Chicago
- 19 JCMS Media Relations Conference, Louisville
- 21 School Health Education Coalition, Bardstown
- Comprehensive Health Council, Louisville
- 22 Governmental Medical Services, Louisville

### MARCH

- 1 Ad Hoc on Certificate of Need, Louisville
- 5 Environmental Quality Commission & EPA, Louisville
- 7 McDowell House, Danville
- 8 Paramedic Advisory, Louisville
- 10-13 CEO Conference, South Carolina
- 13 *Journal* Editors, Louisville
- 14 Judicial Council, Louisville
- Environmental & Occupational Health, Louisville
- 15 Budget Committee, Louisville
- Ad Hoc Study on Cost Containment, Louisville
- KMIC Board of Directors, Louisville
- 19 DHR Hearing on Radiology Regulations, Frankfort
- 22 Peer Review, Louisville
- McDowell Fund Raising, Louisville
- 23 CME, Louisville
- 26 Kentucky Voluntary Effort Meeting, Louisville
- 27 Medicaid Orientation, Louisville
- Title 19 Committee, Frankfort
- 28 Kentucky Advisory Council on Medical Assistance, Frankfort
- 29 Executive Committee, Louisville
- 30 Cancer Committee, Louisville

### APRIL

- 1 Resolution L, Louisville
- 1-2 AMA Regional Conference Meeting, New Orleans
- 2 School Health, Lexington
- 2-3 Medical Aspects of Sports Seminar, Lexington
- 4 LRC Subcommittee on Regulations, Frankfort
- Kempac Board, Louisville
- Board of Trustees, Louisville
- 5 Board of Trustees, Louisville
- Physician's Health, Louisville
- 10 *Journal* Editors, Louisville
- 18 4th District Trustee Meeting, Elizabethtown
- 19 Health Planning Meeting, Frankfort

- 18-21 32nd National Conference on Rural Health, St. Paul
- 19-20 Paramedic Exams, Louisville
- 24 Auxiliary Annual Meeting, Louisville
- 24-25 New Physician Workshop, Louisville
- 26 Interspecialty Council, Louisville
- Licensure Board, Louisville
- Office Manager Workshop, Louisville

## In Memoriam

**ALBERT L. ALLEN, M.D.**  
**Winchester**  
**1907-1978**

Albert L. Allen, M.D., Winchester, died on August 11, 1978. Doctor Allen, a radiologist who graduated from Medical College of the State of South Carolina, had been retired since 1977.

**EDSEL H. BURTON, M.D.**  
**Fairbush**  
**1923-1979**

Edsel H. Burton, M.D., Fairbush, died January 19, 1979. Doctor Burton, a 1946 graduate of the University of Louisville School of Medicine, was in general practice.

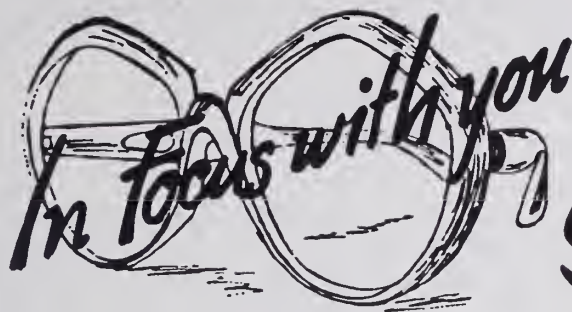
**CARL GEORGE HOFFMAN, M.D.**  
**Ft. Thomas**  
**1910-1978**

Carl George Hoffman, M.D., Ft. Thomas, died on September 1, 1978. Doctor Hoffman, an ENT, was graduated from Eclectic in 1936. Doctor Hoffman had been in retirement since 1976.

## HOUSE PHYSICIANS WANTED

St. Elizabeth Medical Center, a 503-bed Medical Center located in Covington and Edgewood, Kentucky, is seeking to fill two House Physician positions for daytime coverage at its new 182-bed Medical/Surgical Hospital. Usual House Physician duties including Code Blue procedure compose these 7 a.m. to 7 p.m. positions. For further information please contact:

Paul C. Bellendorf, Administrator  
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|                      | Medical Arts Bldg.                           | 1169 Eastern Parkway   | 452-2332 |
|                      | Highland Professional Plaza                  | 810 Barret Ave.        | 584-7934 |
| <b>ST. MATTHEWS</b>  | Professional Bldg. East                      | 3101 Breckinridge Lane | 459-0133 |
|                      | Medix Bldg.—Adj. S.S. Mary & Elizabeth Hosp. |                        | 367-2277 |
|                      | Broadway Bldg.                               | 224 E. Broadway        | 583-7137 |
|                      | 313 Wallace Avenue                           |                        | 895-9155 |
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| <b>NEW ALBANY</b>    | 901 Dupont Road at Breckinridge Lane         |                        | 897-3264 |
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|                      | Doctors Bldg.                                | 1001 Center Street     | 684-1508 |
| <b>OWENSBORO</b>     | Lincoln Professional Ctr.                    | 2816 Veach Road        | 685-4725 |
|                      | Happy Valley Center                          | 409 Happy Valley Rd.   | 651-5113 |
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## Notice To Contributors

Members of the Kentucky Medical Association reading papers before other organizations are asked to submit their papers to *The Journal* for consideration by the Editors for publication. Detailed instructions to contributors appear in the Scientific Section of *The Journal* under Manuscript Memos. Please forward any papers to:

Paul C. Grider, Jr., M.D., Scientific Editor  
The Journal of the Kentucky Medical Association  
3532 Ephraim McDowell Drive  
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## CHANGE OF ADDRESS

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## KMA Annual Meeting September 24-27 1979

Ramada Inn  
Bluegrass Convention  
Center  
Louisville, Kentucky



# Application for Scientific Exhibits

1979 Annual Meeting

Ramada Inn/Bluegrass Convention Center

Kentucky Medical Association

Louisville, Kentucky

September 25, 26, 27

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before July 1, 1979.

## ACCREDITATION



KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category 4 credit.

1. Title of exhibit \_\_\_\_\_
2. Name(s) of exhibitor(s) \_\_\_\_\_  
Address \_\_\_\_\_  
Professional title \_\_\_\_\_
3. Institution if other than exhibitor \_\_\_\_\_
4. Amount of backwall footage required \_\_\_\_\_  
(The draped booth has 4' side walls. This footage should not be included in backwall footage required.)  
SHELF DESIRED? \_\_\_\_\_ (Shelf is 2' deep X width of backwall footage)
5. Will summary printed matter be available or obtainable for the interested physician? \_\_\_\_\_
6. Indicate sources of assistance provided to you in connection with this exhibit \_\_\_\_\_
7. Has this exhibit been displayed before? If so, when & where? \_\_\_\_\_
8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date \_\_\_\_\_

Signature of Applicant \_\_\_\_\_

Fill Out and Mail to:

 **RICHARD A. KIELAR, M.D., Chairman**  
Scientific Exhibits Committee  
Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205 

- KMA provides, without cost to the exhibitor, simple shelves, bracket lights and a title sign.
- Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202
- Transportation and erection costs are the responsibility of the exhibitor.
- Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.
- Equipment which will create noise should not be used during the general sessions and, at other times, should be controlled by head or earphones or a muffling device.



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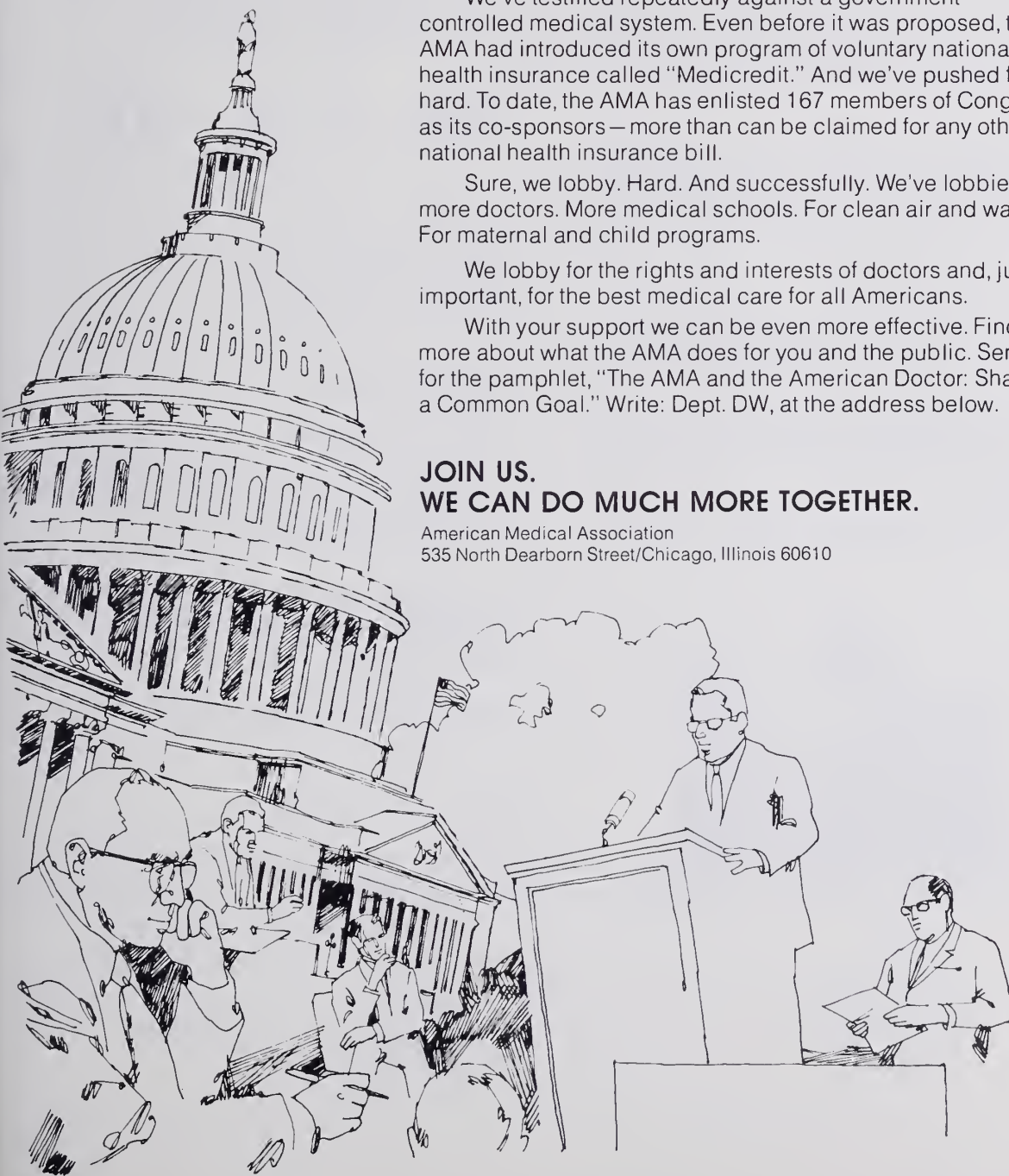
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American Medical Association  
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## CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.

Charges for advertising are: 20¢ per word. Average word count: 7 words per line. \$5.00 minimum. Send payment with order to:

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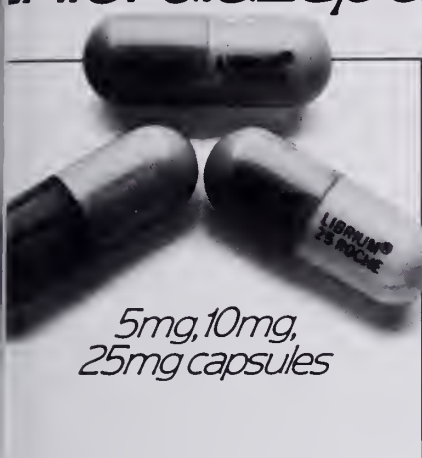
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Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and

acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Usual Daily Dosage:** Individualize for maximum beneficial effects. Oral—Adults: Mild and moderate anxiety and tension, 5 or 10 mg t.i.d. or q.i.d.; severe states, 20 or 25 mg t.i.d. or q.i.d. Geriatric patients: 5 mg b.i.d. to q.i.d. (See Precautions.)

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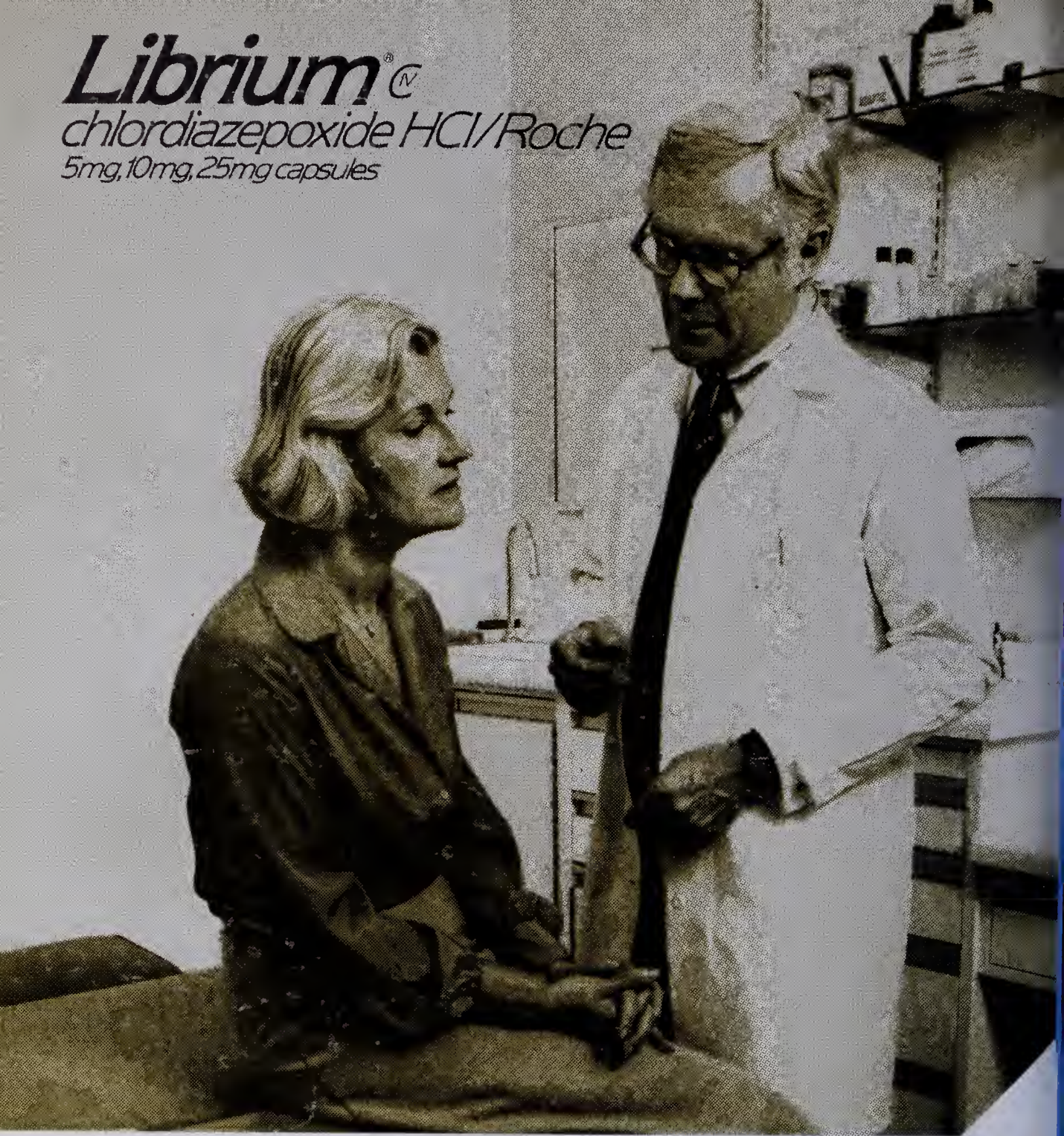
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May 1979  
Volume 77  
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# MESSAGE FROM THE PRESIDENT

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I would like to take this opportunity to give you some of my thoughts which I feel are important to you as KMA members and physicians. Some of these thoughts are old and there are a few new ones.

In this day and time, as never before, it is important for us as physicians to disregard our individual pet peeves and devote our time, energy and money to one cause, i.e. to stand up and try to do our utmost to control the practice of medicine. I would like to challenge you, individually, to learn more about organized medicine and what it is doing for you. Most physicians are not getting involved until some form of government or organization effects you or your practice. Then you complain about your organization. Let me assure you that there is a great amount of time and energy going into various committees and meetings to try to protect the way we want to practice medicine. Remember the Kentucky State Motto—United We Stand. Divided We Fall.

I was disheartened to learn at our board meeting that out of approximately 3000 KMA members only 13% belonged to KEMPAC. Let me urge you to join and give your money so this organization can fight adequately on the political front. This is vital in 1979 because we have just learned that there is another big push in congress to introduce at least the first step of some form of National Health Insurance.

At our April board meeting I was pleased to learn that our KMA budget was sound and that we are not anticipating any dues increase for the coming year. We hope that dues will not have to be increased, but you can never predict what inflation will do to our economy in the coming years.

At this time I would like to personally thank the physicians that are on the Board and various committees for their time and dedication. I would also like to thank the KMA staff for their dedication to KMA and for their excellent work. It makes our meetings worth while and our jobs on the various committees productive. For those of you that have not been involved with the KMA staff, I would invite you to get to know them, for they are more than willing to be of assistance to you.

At the AMA Leadership Conference in Chicago in February we were informed that the medical profession was doing well in the Voluntary Effort for cost control. During the past year we were two to three points below the rate of inflation in increases. This information, if stressed before our congressmen, will help inform them that we are seriously endeavoring to solve our own problems.

WILLIAM T. WATKINS, M.D.  
Chairman Board of Trustees

*This is the third in a series of articles written at the request of Carl Cooper, Jr., M.D., KMA President.*

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- 10-15 4th Family Medicine Review,\* Galt House

#### JULY

- 18-19 KAFP Scientific Meeting, Owensboro

#### SEPTEMBER

- 24-27 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

#### OCTOBER

- 17-18 Hypertension 1979,\*\*
- 20 Kentucky Regional Meeting, American College of Physicians, Hyatt House, Louisville

#### NOVEMBER

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#### DECEMBER

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\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

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# *The* JOURNAL *of the* Kentucky Medical Association

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## Sequence of Emotional Responses Induced by Infertility

Emery A. Wilson, M.D.

Lexington, Kentucky

Although psychological differences have been determined between fertile and infertile patients, whether these differences preceded or were a result of infertility is unknown. The purpose of this study was to determine what emotional changes occur in response to infertility. An open-ended questionnaire was sent to 70 patients with primary infertility prior to the initial visit and these patients were followed for at least 4 months after the infertility investigation. From the responses recorded prior to the initial evaluation and from the responses observed throughout the period of investigation and treatment, a sequence of emotions was detected—disbelief and denial, depression, anger and altered self-image, optimism, desperation, depression, and acceptance. In addition, the patient's expectations of the infertility evaluation and knowledge of the reproductive process and common therapeutic regimens were investigated. The results of this study suggest

that the physician may help to alleviate apprehension prior to the initial evaluation, provide the necessary information for patient understanding of the reproductive process, be aware of and help the patient be aware of the sequence of emotions associated with infertility, dispell misconceptions regarding the treatment of infertility, and assist the patient in anticipating and dealing with the long-term aspects of infertility.

**I**N the absence of specific organic causes, infertility has been attributed to psychological disorders manifested by either physiological or functional disturbances. Physiological changes in response to stress and other psychological factors include alterations in central nervous system monoamine metabolism, hypothalamic-pituitary-ovarian or testicular axis and hypersecretion of adrenal steroids and catecholamines. Functional disturbances include nonorganic problems such as loss of libido, impotence and vaginismus.<sup>2,6</sup>

Conversely, few studies have investigated the impact of infertility on the emotional health of the couple. Although some authors have detected psychological disturbances in infertile patients,<sup>4,5,9</sup> whether these disturbances preceded or were a result of infertility is unknown. Others have been unable to document psychological differences between fertile and infertile patients.<sup>2,3,8,10</sup>

*From the Department of Obstetrics and Gynecology, University of Kentucky College of Medicine, Lexington, Kentucky.*

The purpose of this study was to determine what emotional changes occur in response to infertility and how emotional reactions change during the course of evaluation and treatment. In addition, the patients' expectations of the infertility evaluation and knowledge of the reproductive process and common therapeutic regimens were investigated.

### Methods

The patients were evaluated by the Fertility and Endocrine Unit, Department of Obstetrics and Gynecology, University of Kentucky Medical Center for primary infertility. An open-ended questionnaire was mailed to 35 consecutive couples with primary infertility prior to the initial evaluation. Patients were asked to complete and return the questionnaires without consulting their partners. No information was provided to the couples prior to the initial visit.

The questionnaire consisted of five separate sections. The first section dealt with expectations that patients may frequently have prior to being evaluated. Patients were asked how long they expected to undergo investigation or treatment, expected costs, and their chance of success for pregnancy. The second section of the questionnaire dealt with the patients' knowledge of the reproductive process. The purpose of this section was to determine how much basic information would be necessary during the initial interview in order to assure adequate frequency and timing of intercourse. The third section dealt with the emotional problems and social pressures caused by infertility. Patients were asked to describe their thoughts when they first realized they had a fertility problem and how their thought processes had changed since. Couples were also asked to describe any changes in their relationships with their peers, relatives and with each other. The fourth section dealt with patient attitudes and knowledge of various methods of therapy for infertility including ovulation induction agents, reconstructive surgery, artificial insemination, and adoption. Finally, patients were asked to predict changes in their life-style, relationship with their spouse, and attitude toward themselves if, after investigation and therapy, they were still unable to achieve pregnancy.

After obtaining responses to the above questions, an infertility investigation was performed and all couples were followed at least four months

and for varying durations thereafter depending on the cause of infertility. Emotional responses to infertility reported in the questionnaire and during the investigation were recorded in chronological sequence.

### Results

Questionnaires were sent to 70 patients, 35 females and 35 males. 27 patients did not keep the appointment for the initial evaluation and failed to return the questionnaire. Of the remaining 43 patients, 41 returned the questionnaire and completed the infertility evaluation. Of these 41 patients, 23 were females and 18 were males. None of the females became pregnant during the first four months of infertility investigation and treatment.

#### Patient Expectations

In response to the question dealing with the expectations of patients prior to being evaluated, most patients demonstrated adequate knowledge of the time necessary to determine the cause of infertility as well as the cost and other factors involved. Most patients realized that two months or possibly longer would be necessary to determine the cause of infertility but two males expected the cause to be determined on the initial visit and six patients expected the cause to be determined in less than one month of investigation. All patients expected a reasonable duration of treatment of six months to one year. The expected costs for the investigation and therapy were widespread. Five patients expected the cost to be less than the cost of the initial evaluation and screening studies whereas four patients gave responses which were excessive for the usual costs in this clinic. Most patients were realistic in their expectations for the success of pregnancy. (30-50%)

Questions initiated by the patients in this section included whether hospitalization would be necessary, whether insurance would cover the costs of investigation and treatment, confidentiality, the necessity for laboratory procedures and how much discomfort would be involved in the evaluation.

#### Knowledge of the Reproductive Process

Females demonstrated greater knowledge of the reproductive process than did males. Two-thirds of the females demonstrated adequate knowledge regarding frequency of intercourse, timing of intercourse and familiarity with such



terms as ovulation and fertilization. Only one-third of males demonstrated adequate knowledge of the reproductive process. Patient knowledge regarding the frequency and timing of intercourse provided information with regard to a possible sexual factor. Patients were asked how often couples *their age* engaged in intercourse each month. The response varied from six to twenty times per month which gave an indication of the patients' own frequency of coitus. Questions regarding the timing of coitus during the menstrual cycle in order to provide the best exposure for conception revealed several misconceptions. Responses to this question varied from timing of coitus during menses to midcycle to the premenstrual period. Females were more likely to be correct with regard to coital timing than were males.

#### Emotional Effects of Infertility

From the responses recorded prior to the initial evaluation and from the responses observed throughout the period of investigation and treatment of infertility, a sequence of emotions (Table I) can be detected from the time patients first realized a fertility problem until the time that it was obvious to the patient, following the initial investigation and treatment, that pregnancy was not immediately forthcoming.

#### STAGE 1: DISBELIEF AND DENIAL

The first emotional response to the possibility of infertility was invariably one of shock and disbelief. Many patients were convinced that the problem was only temporary and some, even after years of infertility, were not convinced that they had a problem.

#### STAGE 2: DEPRESSION, ANGER AND ALTERED SELF-IMAGE

The second stage in the emotional responses to infertility was a composite of depression and anger resulting in an altered self-image. Patients described feelings of inadequacy, bitterness, depression, anger, anxiety, and embarrassment. Following the disappointment and depression ex-

perienced when infertility was first confirmed, expressions of anger were manifested by attempts to blame themselves, their spouse, the previous use of contraceptives, and, as one patient stated, "everything."

These emotional reactions led many patients to experience self-doubts and their concept of themselves was altered. The self-image was further damaged when friends or relatives confronted the patients about pregnancy or the possibility of infertility. In response, infertility patients often became paranoid, embarrassed and defensive, emphasizing the desire for confidentiality.

#### STAGE 3: OPTIMISM

The third emotional response to infertility was one of hope and optimism. Patients were then willing to seek medical attention and to even discuss the problem with friends or relatives. Temporally, females tended to reach this stage before males. Patients became more curious about the causes and therapy of infertility and some concentrated intensely on various aspects of the infertility investigation. Although most patients consulted the physician during this stage, many patients had attempted methods of therapy suggested to them by others. Patients often felt temporarily relieved that the cause for their infertility was being investigated.

#### STAGE 4: DESPERATION

If, following the initial investigation, attempts to become pregnant were not immediately successful, patients not uncommonly became desperate and bargained with the physician to employ therapeutic methods known by them to be successful for others. Many treatment methods suggested were either inappropriate for the particular cause of infertility being treated or the method was known to be ineffective.

During this stage, patients often revealed information previously forgotten or concealed which led to a different etiology for infertility and a different course of therapy. Particularly, sexual problems or significant past history were revealed which the patient was previously reluctant to discuss.

#### STAGE 5: DEPRESSION

When absolute causes for infertility were encountered or if therapy was not successful, patients became discouraged and depressed. The disappointment and sense of failure caused some patients to become indifferent to further attempts of therapy.

**TABLE I**  
**Sequence of Emotional Responses to Infertility**

|   |
|---|
| Disbelief and Denial                    |
| Depression, Anger, Altered Self-Concept |
| Optimism                                |
| Desperation                             |
| Depression                              |
| Acceptance                              |

### STAGE 6: ACCEPTANCE

Following the period of depression and disappointment, most patients realized that they must accept life without children or resort to alternatives to pregnancy such as adoption. Preoccupation with their work or other activities also served as alternatives. Some relief was experienced in knowing the cause for infertility and in knowing they tried to correct it.

#### Attitudes Toward Modes of Therapy

Patient attitudes toward established methods of therapy for infertility were influenced by an expected lack of information. Patients were concerned about the complications of any therapeutic modality but particularly concerned about the complications and multiple gestation rate associated with ovulation induction agents. Homologous insemination was acceptable to all patients responding and, although most patients approved of heterologous insemination for others, only four patients approved of this procedure for themselves.

Patients were asked to indicate the minimum chance of pregnancy that they would accept before consenting to surgery to correct infertility. Females tended to accept a lower percentage of success from surgery than did males, even as low as 10%. All of the males indicated that a success rate of 50% or greater would be necessary for them to consent for an operative procedure.

Adoption was acceptable for most patients but three females and two males indicated that they would not consider adoption as an alternative to fertility. These patients indicated either a previous experience with adopted children or a fear of mental or physical disorders which may be encountered in the adopted children.

#### Long-Term Effects of Infertility

Patients were asked to project what impact infertility may have on their future lifestyle and relationship with their spouse. Whereas only one female and two males indicated a change in the relationship with their spouse prior to the infertility investigation, four females and two males indicated that their relationships with their spouse may change should fertility not occur. One female patient contemplated divorce from her present husband in hopes of finding another male with children. Although the remaining patients indi-

cated no change in relationship with their spouse, two couples in this group have subsequently separated their relationship.

### Discussion

The purpose of this study was to concentrate not on the psychosomatic causes of infertility but rather what impact infertility may have on patients' emotions and how the investigational process could minimize this impact and possibly help infertility patients to deal with the problem. The results of this study suggest that the physician may help to alleviate the apprehension present prior to the initial evaluation, provide the necessary information for patient understanding of the reproductive process, be aware of and help the patient be aware of the sequence of emotions associated with infertility, dispell misconceptions regarding the treatment of infertility, and assist the patient in anticipating and dealing with the long-term aspects of infertility.

In this study, 27 patients (38%) did not keep the appointment for the initial evaluation and failed to return the questionnaire. The percentage of patients failing to keep the initial appointment in this group was not significantly different from the percentage of patients who failed to keep the initial appointment during the month preceding the study period (41%). The relatively high percentage of patients who request infertility evaluation but never pursue it can be explained by the elective nature of the investigation, socioeconomic status, the occurrence of pregnancy prior to the evaluation, and, possibly, continued denial that infertility is a problem.

Although psychological problems have long been recognized in patients with infertility, documented psychosomatic causes for infertility have been lacking. Denber, in his recent review of the psychiatric aspects of infertility, was unable to find consistent and conclusive evidence for psychological causes of infertility due to the paucity of well-controlled studies.<sup>2</sup> Whether psychological problems in the absence of psychotropic agents can cause infertility or whether they are induced by infertility is not easily distinguished. The sequence of emotional reactions to infertility reported in this study are not unlike those of any reaction to grief or disappointment. Kubler-Ross described similar stages of emotional reactions to death and dying: denial and isolation, anger, bargaining, depression, and acceptance.<sup>7</sup> As with



any disappointment, the initial response of infertility patients is one of shock and disbelief, particularly when previous plans of childbearing are disrupted and denial of such problems can be interpreted as a defense mechanism. Such denial can even delay or interfere with the investigative process by delaying the initial visit and occasionally by the reluctance of one partner to be evaluated, particularly the male. Mixed emotions follow, alternating between depression and anger and leading to an altered self-image. Platt and co-workers<sup>9</sup> studied the personality traits and self-ideal concept discrepancies between fertile and infertile couples and found that infertile men and women perceive their lives being controlled by persons or events external to themselves and perceive themselves as less than ideal. Decrease in self-esteem leads some couples to become progressively more isolated.

Although most patients consulting the physician for the first time were cooperative and optimistic (Stage 3), many presented with signs of anger and denial. It is as significant for the physician to know and understand the sequence of emotions encountered by infertile patients as it is for infertile patients to understand their own actions. Belligerence or complaints encountered during the infertility evaluation should be interpreted as a normal response to infertility rather than a threat to the physician.

The desperation (Stage 4) frequently exhibited when the initial investigation and treatment is unsuccessful can be used to the patient's advantage. A review of the history and physical examination during this period is often beneficial in that significant findings which the patient was previously reluctant to discuss may be revealed. Patients should be encouraged at this point to complete the investigation and to continue any therapeutic regimen for a sufficient duration in order to avoid the indifference associated with depression. The mean length of time necessary for an apparently normal couple at peak age of fertility to achieve conception is 5.3 months.<sup>1</sup> Infertility patients should realize that an equal duration of exposure is necessary once the causative factors have been treated.

Although some degree of depression is inevitable should pregnancy not occur, the physician may be able to minimize the severity or duration of depression by informing the patient that this response is normal and can be expected.

The results of this study also indicate that the infertile couple can be relieved of some apprehension by information provided prior to the initial visit. Material distributed prior to the initial visit can help to answer questions regarding procedures performed during the first visit and during the investigation, any discomfort involved, and can also insure confidentiality as much as possible. Some knowledge of the reproductive process can also be provided prior to the initial visit, reducing the time necessary to discuss this subject during the first visit. Reassurance regarding various modes of therapy during the treatment phase is also important and common misconceptions about their effectiveness or complications can be dispelled.

The degree of final acceptance of a childless marriage depends on the couple's maturity and interpersonal relationship as well as to the extent that they feel that all attempts at diagnosis and therapy of infertility have been exhausted. If the couple's relationship was in jeopardy for other reasons, a confirmed barren marriage is less acceptable. The results of this study indicate that even in the absence of known previous interpersonal conflict, confirmed infertility can precipitate a change in relationship. For other couples, a thorough investigation of the causes of infertility followed by energetic and exhaustive attempts at treatment by the physician can provide a sense of relief and can facilitate acceptance.

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# Factitious Illness in Urology: Munchausen's Syndrome

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Five cases of Munchausen's Syndrome with fictitious urologic symptoms are reported. Various modes of presentation of this psychiatric illness are described to alert the physician and prevent fruitless invasive investigations.

The factitious illness known as Munchausen's syndrome is not uncommon; most urologists have seen patients with this disorder. In 1951, Asher<sup>1</sup> described this syndrome, named after the German Baron Hieronymus Karl Frederick von Munchausen (1720-1797) who travelled widely and was well known for his telling of "tall tales".

Generally, the patients with this syndrome are seen with apparent acute illnesses, supported by dramatic histories. These patients usually have multiple previous hospitalizations and many surgical scars. The purpose of this report is to describe five such cases and to review pertinent literature regarding patients who present with factitious urologic symptoms.

## Case Reports

**Case 1.** A 42-year-old man was admitted with left renal colic and gross hematuria. He claimed to have sustained multiple machine gun wounds to the abdomen and left flank years prior to admission. Medical history included left ureterolithotomy in 1968 and left pyelolithotomy in 1972. He indicated drug allergy to iodine, morphine, thorazine and phenergan. He gave his occupation as marine biologist with a Ph.D., presently employed by the Biological International Department of Oceanography in Martinique, France, and claimed to have worked under Jacques Cousteau.

Physical examination revealed a caucasian male with two surgical scars on the left flank and

left lower quadrant of the abdomen that substantiated the history of left pyelolithotomy and ureterolithotomy. There was marked tenderness in the left flank and left side of the abdomen. Urinalysis disclosed microscopic hematuria. Roentgenographic examination of the abdomen showed wire sutures from previous operations and partial resection of left twelfth rib compatible with left renal operation. Multiple calcifications were scattered on the left side of the abdomen but no definite kidney shadow was seen. Because of an alleged sensitivity to seafood and iodine, cystoscopy and left retrograde urogram were obtained. No urinary efflux was observed from the left ureteral orifice, and the ureterogram showed complete obstruction at about 10 cm. from the bladder. No stones were demonstrated radiographically. Right retrograde urogram was normal. Because of frequent requests for large amounts of Demerol® (meperidine hydrochloride), the staff became suspicious and began checking into this patient's background. Bethesda Naval Hospital, where he claimed to have undergone prior surgical operations, had no record of his name. The existence of the organization he claimed to work for could not be verified by the various U.S. organizations contacted. During these investigations, he left the hospital without paying his bill. Although unsubstantiated, it is believed that he had had left nephrectomy and the left retrograde urogram shows the left ureteral stump.

This patient was reported in the professional patients column of the *Journal of the American Hospital Association*.<sup>2</sup> He also bears a striking similarity to the patient described by both Unfug<sup>3</sup> and Hellerstein.<sup>4</sup>

**Case 2.** A 42-year-old man, who gave his occupation as farmer but was found to be a respiratory therapist, presented on numerous occasions with complaints of gross hematuria, chills, fever, pain in the right side of the abdomen and pneumaturia. Physical examination demonstrated,

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inconsistently, abdominal tenderness on the right side. Prostatitis was suggested by rectal examination. Urinalysis showed pyuria and microscopic hematuria at various times. Multiple examinations to evaluate his complaints included two excretory urograms, two cystoscopies, one bilateral retrograde urogram, two voiding cystourethrograms, two upper gastrointestinal barium studies, two barium enemas and two sigmoidoscopic examinations. All were normal.

He required narcotics parenterally while in the hospital but discharged himself against medical advice when laparotomy was mentioned as the next step to investigate the cause of his complaints. He has also been investigated for brain tumor with severe headache and hemiparesis but without any definite diagnosis. After most of the physicians in this area were alerted about this patient, he finally consented to psychiatric evaluation. One interview with the psychiatrist was videotaped, but before full evaluation could be completed the patient disappeared, very possibly to another hospital in another area of the country.

This may be a pure drug addiction problem in a person trained in an allied health field. Pneumaturia as a symptom has not been reported in Munchausen's syndrome.

**Case 3.** A 35-year-old male grocery clerk was hospitalized four times with acute urinary retention and right flank pain. Pertinent medical history included operations for hemorrhoids and fistulas, vagotomy and pyloroplasty, and appendectomy. He also gave a history of hypertension, gout, pancreatitis, and possible multiple sclerosis. He further reported having inhaled sulfuric acid during a barge accident some seven or eight years earlier. Physical examination showed a distended and diffusely tender abdomen with multiple previous surgical scars. Catheterization of the bladder produced 1100 ml. of clear urine. Multiple laboratory and radiologic studies of urinary and gastrointestinal systems as well as tests for porphyria were within normal limits. The medical consultant felt that the history of this patient was obscure with no physical abnormalities and that the patient's affect was inappropriate for the illness. The neurologist found the history misleading and great discrepancy in performance on neurological examination. At one time, the patient dragged his left foot on walking and at other times he would forget and drag the right one. Psychiatric consul-

tation suggested that this patient had a conversion reaction with possible Munchausen's syndrome. The patient refused transfer to a psychiatric facility and left the hospital against medical advice.

**Case 4.** A 47-year-old retired Army nurse was seen on three separate occasions by the urology service of the Louisville Veterans Administration Hospital with complaints of left flank pain and passage of urinary stones. Urologic workup for stone disease was within normal limits. Stone analysis showed the stones she presented to be artifacts. This patient has also been investigated on numerous occasions by various services and has had many diagnostic studies, the results of which were always normal. Earlier, she had had a below-the-knee amputation because of persistent and excessive pain.

**Case 5.** A 24-year-old female nurse presented to many different hospitals in the Louisville area with symptoms of urinary tract infection. She gave a history of having passed bladder stones and of having a calcium oxalate stone removed by basket. History also included excision of trochanteric bursa bilaterally and exploration of the left hip joint with removal of calcium spurs. She claimed to have had a ruptured right corpus luteal cyst and appendectomy in 1972. Extensive investigations for hyperparathyroid showed normal findings. During these hospitalizations, she had lumbar myelogram, electroencephalograms, brain scan and complete urologic workup in the form of excretory urograms and cystoscopic examinations; all were within normal limits. On one occasion, she complained about an enlarging pigmented skin lesion, which biopsy proved to be a tattoo. The patient repeatedly requested pain medication and refused to take Talwin (pentazocine) or Empirin (aspirin, phenacetin, caffeine) claiming that they were not strong enough. On her last admission to the hospital, she had severe flank pain and gross hematuria. Physical examination was essentially normal except for a plaster cast on her right leg. She produced two stones which she claimed to have passed; analysis showed them to be carbonate apatite (not urinary calculi). Some six months before this admission, she presented at an emergency room with a cast on her left leg because of a fracture suffered while skiing in New Hampshire. Radiologic examination failed to show any fracture and the plaster cast was removed.



### Discussion

The typical patient is associated with the medical profession in some way and is masochistic and difficult to treat. Asher<sup>5</sup> and Chapman<sup>6</sup> described five modes of presentation:

1. Acute abdominal pain
2. Hemorrhage
3. Neurologic complaints
4. Skin eruptions
5. Fever

These patients take considerable risk in feigning an acute medical or surgical illness. Their histories typically include multiple hospital admissions in various hospitals, many surgical scars, and several false identifications (pseudologia phantastica).<sup>7</sup>

Among the many motives proposed for this syndrome are a need for attention to provoke sympathy and support,<sup>8</sup> intense desire to deceive the medical profession,<sup>9</sup> free room and board,<sup>10</sup> drug addiction,<sup>11,12,13</sup> and primary psychiatric disorder. The underlying psychopathology is not fully understood because patients refuse complete psychologic evaluations almost universally. The most common diagnosis in male patients has been sociopathy and in female patients hysterical conversion reaction.<sup>8</sup> The most important principle in management is to recognize these patients. It is not a simple task, as one of the most important attributes of the physician is a readiness to accept the patient's story. Great care must be exercised before diagnosing factitious illness. Sjöberg<sup>14</sup> described a patient with a large ship tattooed on his chest who was well known to the medical community as having Munchausen's syndrome. A man of this description was denied admission by the emergency room physician for abdominal pain. After a delay a perforated peptic ulcer was diagnosed; it was not the same man. Therefore, Munchausen syndrome should not only be a diagnosis of suspicion but also of exclusion so as not to miss genuine illness. Most of

the patients with urologic symptoms present with hematuria or other symptoms of urolithiasis.

Numerous ways of preventing deception of the medical profession have been suggested: hospital black lists or a rogue's gallery of persons with Munchausen's syndrome;<sup>15</sup> telling the patient he has Munchausen's syndrome so on his next admission he will give this diagnosis to the physician;<sup>16</sup> and photographing the person suspected of Munchausen's syndrome, as these patients typically will discharge themselves if they believe they have been discovered.<sup>17,18</sup> Identification of these patients before expensive evaluations and invasive procedures are performed is an enormous responsibility. Medical and emotional support should be provided to such patients by the primary physicians and specialized help sought from psychiatrists. These are difficult patients to manage, and the prognosis has not been good.

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Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.



# A Clinical Approach to the Choice of Antimicrobial Agents, Case Number 5. Fever and Meningismus

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This is the fifth in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics.

A 25-year-old male presents with a 36 hour history of fever, headache, nausea and vomiting. He has not taken any medication. On physical examination, he is alert but appears ill. His temperature is 103°F, BP 120/80 mm Hg, pulse 100/min, respirations 26/min. The only abnormal physical findings are mild nuchal rigidity, 4+ deep tendon reflexes in the lower extremities and bilateral ankle clonus. The plantar responses are flexor. His WBC is 14,000 with 70% neutrophils, 15% bands, 10% lymphocytes and 5% monocytes. Lumbar puncture yields clear cerebrospinal fluid (CSF) under an opening pressure of 250 mm H<sub>2</sub>O. Total CSF cell count is 15 WBC/mm<sup>3</sup> of which ten are lymphocytes and five neutrophils. The protein content is 45 mg/dl and the sugar 50 mg/dl (concomitant blood sugar is 110 mg/dl). A gram stain reveals no organisms and an India ink preparation is negative.

The differential diagnosis should include:

- A. Fungal meningitis
- B. Tuberculous meningitis
- C. Bacterial meningitis
- D. Aseptic meningitis
- E. Brain abscess

**Answers: C and D**

Fungal and tuberculous meningitis do not, as a general rule, present with an acute clinical picture.<sup>1,2</sup> The history of an illness only 36 hours in duration is very much against either one of these two diagnoses. Patients with tuberculous and fungal meningitis usually have very low CSF sugar levels<sup>1,2</sup> and the protein content is also usually higher than that seen here. Although hypoglycorrhachia is also seen in acute bacterial meningitis it would be unusual to see it in the ab-

sence of higher CSF leucocyte counts and organisms on gram stain.

The history is also not suggestive of a brain abscess due to the acute illness. Patients with a brain abscess are usually not febrile on admission<sup>3</sup> and the most common physical finding is that of hemiparesis.<sup>4</sup> The CSF findings are non-specific in patients with brain abscesses and may on occasion be normal.<sup>3</sup> However, if brain abscess is suspected, a lumbar puncture should not be performed since it is not diagnostic and it can also increase patient mortality by brain stem herniation.<sup>3,5</sup> Had the patient taken antibiotics prior to the performance of the lumbar puncture the differential diagnosis would have included partially treated bacterial meningitis. A computerized axial tomographic brain scan was done shortly after admission and was interpreted as normal.

The next course of action would be to:

- A. start intravenous penicillin G, 20 million units/24h.
- B. start chloramphenicol 1 gram IV Q 6 h.
- C. start cefoxitin 2 grams IV Q 4 h.
- D. do not institute antimicrobial therapy and repeat the lumbar puncture in 6-12 hours.
- E. brain biopsy

**Answer: D**

Since the differential diagnosis is that of bacterial meningitis versus aseptic meningitis, and only the former can be treated with antibiotics more information is required in order to distinguish between these. By repeating the lumbar puncture within the next 12 hours enough information will be obtained so that a decision of whether or not to begin antibiotic therapy can be made. If the patient has a bacterial meningitis his cerebrospinal fluid will show increased numbers of leucocytes, the majority of which will be neutrophils (in the absence of prior antibiotic therapy) and the CSF glucose will decrease. If the patient has an aseptic meningitis the CSF glucose and protein will remain the same and although the number of leucocytes may increase the differential count will contain predominantly mononuclear cells.

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A petechial progressing to a purpuric rash was noted 12 hours after admission. A lumbar puncture repeated at that time revealed an opening pressure of 300 mm H<sub>2</sub>O, a total cell count of 870/mm<sup>3</sup> of which 98% were neutrophils, a CSF sugar of 20 mg/dl and protein of 65 mg/dl. A gram stain of the CSF revealed many white cells with intra and extracellular small gram-negative diplococci.

Your drug of choice will be:

- A. Trimethoprim sulfamethoxazole (Bac-trim,<sup>®</sup> Septra<sup>®</sup>)
- B. Chloramphenicol
- C. Penicillin G
- D. Metronidazole (Flagyl<sup>®</sup>)
- E. Cefoxitin (Mefoxin<sup>®</sup>)

**Answer: C**

The clinical picture and the CSF gram stain findings are suggestive of meningococcemia (*Neisseria meningitidis*) and meningitis. Although trimethoprim sulfamethoxazole, chloramphenicol, and metronidazole all penetrate the cerebrospinal fluid barrier well even in the absence of inflammation<sup>6</sup> the drug of choice for meningitis due to *N. meningitidis* is penicillin G, given intravenously at doses of 20 million units/24 h for a total duration of 10-14 days. Chloramphenicol would be an adequate substitute in the presence of a history of allergy to penicillin. Trimethoprim sulfamethoxazole may be quite effective here but has not yet been released in intravenous form or approved by the Food and Drug Administration for use in this condition. Although metronidazole will yield good CSF levels, it is ineffective against aerobic bacteria. Cefoxitin has been shown to penetrate the CSF in therapeutic concentrations in the presence of meningeal inflammation,<sup>7</sup> and successful therapy has been reported.<sup>8</sup> However its utility in this regard has not been fully evaluated.

Patients with bacterial meningitis often present with more clear-cut findings in the CSF and therapy can be instituted immediately based upon

these results. Occasionally, analysis of the CSF may not reflect unequivocal findings (as in this case) and therapy must be withheld pending a more accurate assessment of the situation. When this occurs it cannot be emphasized strongly enough that extremely close clinical observation of the patient is essential. Any suggestion of clinical deterioration should prompt an immediate repetition of the lumbar puncture. In patients who have been pretreated with an antimicrobial agent prior to performance of the lumbar puncture the CSF findings may be of little value and decisions for empirical therapeutic intervention must be based upon individual clinical assessments of patient status. If a decision to start antibiotics is made under these conditions you would use

- A. Cefazolin (Ancef<sup>®</sup>, Cefzol<sup>®</sup>)
- B. Gentamicin (Garamycin<sup>®</sup>)
- C. Chloramphenicol
- D. Tobramycin (Nebcin<sup>®</sup>)
- E. Clindamycin (Cleocin<sup>®</sup>)

**Answer: C Chloramphenicol**

Of the choices listed, chloramphenicol is the only compound capable of achieving therapeutic concentrations in the CSF.

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## The Use Of Staples In Surgery

Surgical procedures involve many hours of repetitive cutting, ligating and suturing and any technique which shortens these procedures would significantly shorten operating time. While judgement is the most important aspect of any surgical management, techniques which do shorten operating time play a major role in reducing morbidity and mortality. Major efforts have been made by different surgeons to introduce mechanical suturing methods and the following is a review of the current state of the art.

The original development of a stapling device for suturing tissue was by Hultl (1), but his instrument was very cumbersome and took more time to assemble than to operate. The first practical and useful design was that of VonPetz whose clamp provided a safe and hemostatic closure. The basic concept of the VonPetz clamp was improved upon by the European and Japanese surgeons. The Russians played a major role in developing automatic suturing devices. In this country Ravitch and Steichen played a major role in popularizing mechanical devices for routine surgical use (1,2,3).

The instruments for use as automatic suturing or ligating purposes should be simple to handle, easy to sterilize and also to load. The latter two features have been achieved by development of presterilized, preloaded cartridges. The fine staples used in these instruments are made of stainless steel and are not irritating to the tissues. When closed, the staples attain a "B" configuration and maintain excellent approximation of the edges of the tissues and also maintain hemostasis. The instruments are used for (1) transection and simultaneous closure of hollow viscera; (2) linear suture closure; (3) anastomosis either linear or circular; (4) ligation and division of vessels and (5) closure of wounds including skin.

In the linear suturing instruments, of which the TA (thoraco-abdominal) instrument is best known, the edges of the bowel or other tissues are

firmly held between the blades of the instrument and the staples closed. A variety of cartridges with desired length, size and pattern of sutures are available commercially (TA 30mm, 55mm and 90mm). The gastrointestinal anastomosis (GIA) stapler provides two double rows of staples and transects the tissue between the central staple lines. The instrument avoids the need for a second layer of manually placed reinforcing sutures. The end-to-end anastomosis (E-E-A) instrument is more recently developed and permits a circular suture line as opposed to the linear suture line of the earlier instruments. The two ends of the hollow viscera are held by purse-string sutures and the clamp is then manually activated. This results in placement of a circular row of staples and, in addition, transection of the tissue held by the purse-string sutures within the staple line, so that no spur or septum is left in place. The ligating and dividing stapler (LDS) does both maneuvers in a single effort. The skin stapler is another very useful tool and essentially speeds up the closure of the skin.

With instruments available as noted above, their capability in different areas will be outlined. In general surgical procedures, the staplers have been used in various gastrointestinal operations such as gastric resection, closure of the duodenum and of the gastric pouch with a TA instrument, and side-to-side gastrointestinal anastomosis with a GIA (2,3,4). The GIA has also been used for anastomosis and resection of the small and large bowel and creation of Roux-en-y loops. These instruments are also suitable for esophageal resection and reconstruction by the reversed gastric tube. The E-E-A has been used in establishing a low rectal anastomosis following anterior resection and also in gastroesophageal disconnection and reconnection for esophageal varices, thus interrupting the varices. In these two situations, the mechanical sutures have a definite technical superiority over manually placed sutures. Staples



have also been used in vascular surgery to close the stump of the portal vein, the stump of the distal aorta or iliac arteries in performing aorto-femoral bypass, to close the patent ductus or even to perform a vascular anastomosis. However, in the latter situation they are not frequently applicable because of atheromatous changes in the vessels and consequent rigidity of the vessel walls. Staples have also been used in dividing the broad ligament of the uterus and closure of the vaginal stump during hysterectomy.

In the thorax, staples have found application in closure of bronchial stumps, of pulmonary artery and pulmonary veins after lobectomy and pneumonectomy. They are also useful in excision of emphysematous blebs, wedge and segmental resections of the lung tissue. Their application in esophageal surgery and in patent ductus has already been noted.

In addition to the advantages of rapid suturing, stapling provides a uniform suture line and minimal pulling and tearing of tissues during suturing. The trauma to tissues is less and therefore the inflammatory response is less and hopefully healing will be improved. However, all of this depends on proper application of the staples. In the final analysis, staples are only as good as the person who uses them.

Complications associated with all of the suturing techniques have been seen with staples also (5,6). Bleeding from suture lines, breakdown of anastomosis, blowouts of bronchial stumps, etc., have all been documented. Instrumental failures such as failure of closure of staples, failure of division of tissue, and difficulty in release of clamps have also been documented. Proper train-

ing and experience and the use of good instruments will reduce the risk of this happening. It should also be realized that after repeated use, the instruments may fail. Awareness of possible complications will enable one to recognize them early and correct them. Occasionally, suture lines might require reinforcing and bleeding from transected margins may require a suture ligature or application of the cautery. Similarly, care must be exercised during the stapling so that neighboring tissues, which are not involved in the dissection or operation, are not inadvertently included.

It is now certain that staples and staplers have been increasingly accepted by surgeons and their use will continue to increase. Along with this, there have been newer developments in instruments as also in areas of their applications. They will not make a bad surgeon into a good surgeon, but will certainly help good surgeons improve the speed and simplify the suturing techniques.

M. D. RAM, M.D., PH.D.

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EPHRAIM MCDOWELL HOUSE AND  
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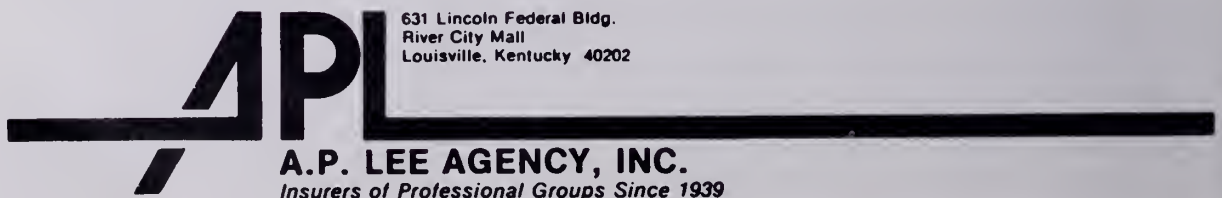
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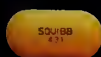




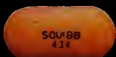
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A syndrome resembling lupus erythematosus has been reported with oral maintenance procainamide therapy. Common symptoms are polyarthralgia, arthritis and pleuritic pain. Fever, myalgia, skin lesions, pleural effusion and pericarditis may also occur. Rare cases of thrombocytopenia or Coombs-positive hemolytic anemia, possibly related to this syndrome, have been

reported. Measure anti-nuclear antibody titers at regular intervals in patients on procainamide for extended periods of time or in whom symptoms suggestive of lupus-like reaction appear; in event of rising titer (anti-nuclear antibody) or clinical symptoms of LE, assess the benefit/risk ratio related to continued procainamide therapy (see boxed Warning). Steroid therapy may be effective if discontinuation of procainamide does not cause remission of symptoms. If the syndrome develops in a patient with recurrent life-threatening arrhythmias not otherwise controllable, steroid-suppressive therapy may be used concomitantly with procainamide.

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A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

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## GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course

### Renal Mass in a Patient Presenting with Ureteral Calculus

With modern radiologic techniques, renal masses are now found more frequently and often incidentally. The following case illustrates the finding of a renal mass in a patient admitted for typical left-ureteral colic from a stone in the ureter. After the routine removal of the stone, the urologic and radiologic investigations were carried out to diagnose the renal mass. The pathologic findings and differential diagnosis are presented in the discussion.

#### Case Report

A 58-year-old white man was admitted to the hospital with severe left flank pain that radiated to the left groin. There was slight burning on micturition but no other urinary symptoms. He had experienced dull, low backache for several weeks prior to the acute attack. Past history disclosed that he is a veteran of World War II with service connected disability for chronic anxiety reaction. He received electric shock therapy in 1956 and had prefrontal lobotomy in 1957. He takes Dilantin®, Phenobarbital®, and Librium®. He does not smoke and drinks alcohol in small quantities.

Physical examination disclosed his temperature, pulse and blood pressure to be normal. Examination of cardiovascular and respiratory systems was within normal limits. The only significant finding was left flank tenderness.

Urinalysis disclosed no blood, glucose, or proteins in the urine. There were 10 to 12 white blood cells per high power field in the sediment. Other laboratory values were: hemoglobin level, 16.4 gm%; hematocrit, 47.6%; white blood cell count, 8500 with normal differential; blood urea nitrogen, 5 mg%; serum creatinine level, 1.9 mg%. The remainder of the blood chemistry examination was within normal limits.

*From the Section of Urology, University of Louisville School of Medicine and the Urology, Radiology and Pathology Services of the Veterans Administration Hospital, Louisville, Kentucky.*

The chest and lumbar spine roentgenography at the time of admission disclosed no abnormalities. On the plane abdominal film, the ureteral calculus was the only abnormality; no other soft tissue calcification or unusual soft tissue masses were identified. Excretory urography disclosed a left ureteral calculus that was partially obstructing the left collecting system (Fig. 1). The usual radiographic appearances of ureteral calculus were present: renal enlargement, delay in opacification of the collecting system and blunting of the minor calyces. In addition, two other features were noted: distortion of the lower pole calyx in association with an irregular pooling of contrast material and a focal mass effect in the lower pole, the entire circumference of which was not adequately delineated.



Figure 1. Excretory urogram showing left ureteral calculus (arrow).



Cystoscopy disclosed a normal bladder and urethra. Basket extraction of stone was performed without any difficulty. Urine sample was collected from the left kidney; cytologic examination disclosed no tumor cells. Stone analysis showed a 14.7 mg calculus composed of calcium oxalate monohydrate crystals with intermixed flecks of mucoprotein and dried blood. After extraction of the stone, retrograde pyelogram disclosed that all previously documented radiographic abnormalities had reverted to normal with the exception of the lower pole calyx. In addition to distortion of the lower pole calyx there now appeared to be intraluminal filling defects (Fig. 2), which were presumably related to the mass in the lower pole. We employed a systematic approach to diagnose renal mass (Fig. 3). Infusion nephrotomography disclosed nonhomogeneous opacification of the mass (Fig. 4). The appearances suggested several cystic or necrotic areas without clear lines of demarcation from the more solid-appearing components of the mass or the normal renal parenchyma. Later cuts and selective angiography (Fig. 5) demonstrated contrast filling in these areas in continuity with the lower pole calyx. The walls of the cavities were irregular, extending beyond the normal cortex, but contrast material did not extravasate into perirenal tissues.

The arterial supply to the mass consisted of occasional penetrating branches of normal intrarenal vessels supplying portions of the walls. There was no neovascularity, arteriovenous shunting, or venous laking. The subsegmental vessels were attenuated and stretched about the mass with no evidence of encasement. No prominent capsular arteries or veins were seen and the flush aortogram demonstrated no parasitization of extra renal vessels. Invasion of the collecting system by the mass (even though cystic) removed the lesion from the category of benign cystic lesion.



Figure 2. Retrograde urogram after stone extraction.

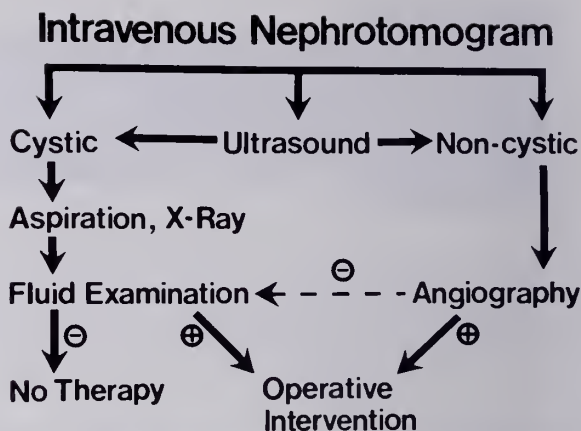


Figure 3. Systematic approach to diagnosis of renal mass.



Figure 4. Excretory nephrotomogram showing lower polar mass of left kidney.

The left kidney was explored through the flank incision. A multicystic mass not clinically typical of neoplasm was encountered. Needle aspiration revealed bloody fluid. Radical nephrectomy was performed.

The operative specimen was a completely excised 183 gm left kidney. In the lower pole and predominantly involving the posterior aspect was a  $4.5 \times 4.5$  cm well-demarcated, bosselated tumor mass. It protruded into the pelvis but was separated from the cavity by a 2 mm pseudocapsule of compressed renal parenchyma. The overlying calyceal mucosa was focally eroded and superficially ulcerated. The largest ulcer was  $1.0 \times 0.8$  cm. Although the tumor distorted the cortical surface and stretched the renal capsule, invasion was not evident. The attached hilar tissues containing the renal vein, artery, and the proximal ureter were not remarkable. The cut surface of the kidney revealed a hemorrhagic multicystic lesion. The largest cyst was 2.0 cm in greatest dimension (Fig. 6).

Microscopically, there were nests of well-differentiated adenocarcinoma (clear cell type) infiltrating the hypertrophic bundles of collagen (Fig. 7). Malignant clear cells were identified at the perimeter of several of the spaces.

His postoperative course was uneventful and follow-up lung tomogram and bone, liver, and spleen scan (radioisotope) have been normal. He is performing normal activities 1 year following operation.



Figure 5. Selective arteriogram of left kidney demonstrating contrast filling in the cystic or necrotic areas in continuity with the lower pole calyx.

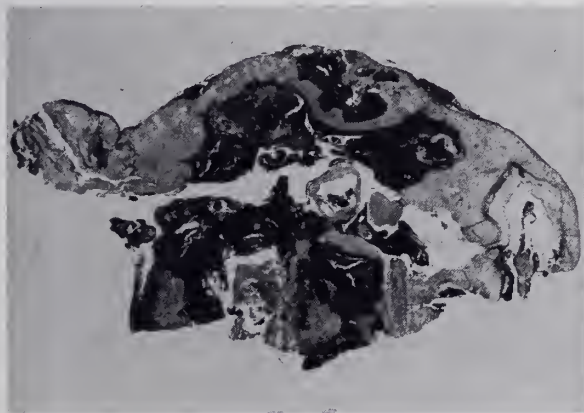


Figure 6. Multiple hemorrhagic cysts within a renal cell carcinoma. (Masson's Trichrome Stain 6.5X)

### Discussion

Two other maneuvers which might have added further information at the time of angiography would have been super selective injection of dye into the main renal artery following injection of epinephrine.<sup>1,2</sup> These sometimes allow visualization of fine neovascularity in what might otherwise be thought an avascular lesion. Ultrasonography is extremely accurate in distinguishing cystic from solid masses and, when coupled with cyst puncture and cyst fluid analysis, can eliminate the need for angiography and/or surgical exploration in the diagnosis of benign simple cysts.<sup>3,4</sup>

Certain inflammatory processes can present as unifocal, unilateral renal masses invading the collecting

system. Tuberculosis, showing a wider variety of features than any other disease of renal parenchyma, can manifest in such a way. Radiographically disclosed tuberculoma is a relatively hypovascular lesion. Necrotic centers will appear as irregular filling defects on the nephrogram and the angiogram may demonstrate fine peripheral neovascularity in the walls.<sup>5</sup>

Non-tuberculous inflammatory lesions can produce focal renal masses which sometimes invade the collecting system. Xanthogranulomatous pyelonephritis is an unusual disorder in which the presence of bacteria in renal parenchyma induces the formation of nodules containing large lipid filled macrophages, plasma cells and lymphocytes.<sup>6</sup> Most frequently the patients are women with a history of chronic or recurrent urinary tract infection. A nephrogram may well demonstrate multiple filling defects with irregular thick walls corresponding to the inflammatory mass. Angiography is nonspecific. Stretching and attenuation of normal renal vessels is often noted; but neovascularity, venous laking, and encasement of vessels indistinguishable from the appearance in a malignant neoplasm are always found in this tumefactive form of xanthogranulomatous pyelonephritis.<sup>5,6</sup>

A renal abscess may demonstrate radiographic features similar to those manifest in tumefactive xanthogranulomatous pyelonephritis. There is usually no calcification in either the parenchyma or collecting system. Although abscess can be associated with urinary tract infection or obstructing stones, by far the most common cause is hematogenous metastatic invasion. If the process does not respond to treatment or undergo spontaneous resolution, central necrosis together with peripheral fibroblastic proliferation and neovascularization will occur. If confined to the kidney, the process will appear radiographically as a unifocal mass usually polar in location,<sup>7</sup> with increased uptake of contrast media in the nephrographic phase of excretory urography and angiography. If the lesion has proceeded to central necrosis and cavitation, radiolucent defects will be identified on contrast studies with adjacent thick, irregular walls staining densely. Again, angiography will usually demonstrate some form of peripheral inflammatory neovascularity.<sup>6,8</sup>



Figure 7. Clear cell carcinoma assuming an acinar pattern and infiltrating hypertrophic bundles of collagen tissue. (1000 X).



The patient's age, sex, and clinical history suggested that we were dealing most probably with a malignant lesion. In the adult, greater than 90% of such lesions are adenocarcinomas arising from mature renal tubular epithelium. These tumors demonstrate a wide variety of cell type, morphology, and arrangement. The vascular patterns also vary from hypo- or avascularity to the markedly hypervascular pattern with venous pooling, arteriovenous shunting, and parasitization of blood supply.<sup>6</sup>

Primitive cell tumors (Wilm's tumor, nephroblastoma) are almost exclusively confined to the pediatric age group. Other mesenchymal tumors (fibrosarcoma, liposarcoma, myosarcoma, and hemangioendothelioma) are very rare in any age group. Metastatic lesions to the kidneys, noted twice as frequently in autopsy series as primary neoplasms, are usually small (<2 cm in diameter) and cause no symptomatology.<sup>9</sup> Renal invasion by such malignant processes as Hodgkin's lymphosarcoma, and leukemia most frequently manifests as diffuse bilateral involvement, resulting in clinical evidence of extensive lymphatic or bone marrow disease.<sup>6</sup>

One other category of primary malignancies manifesting as a unilateral, unifocal renal mass is that of primary epithelial tumors of the renal pelvis. Most of these are transitional cell in origin and present as filling defects or obstructing lesions confined to the renal pelvis or calyces. A much rarer form of epithelial tumor is the nonpapillary squamous cell carcinoma which will frequently invade renal parenchyma producing mass effect in the kidney and very little or no intraluminal extension. Such tumors are usually solid but can undergo necrosis and cavitation. Angiographic studies that indicate relatively avascular lesions with encasement and attenuation of normal renal vascularity are the primary findings. These tumors are thought to be related to the presence of chronic leukoplakia and recurrent stones and in several series calculi were disclosed on plane films in approximately 50% of the patients. The condition is more common in men than women.<sup>10</sup> Our patient, however, had an advanced lesion in the kidney at the time of his first stone.

The cystic degeneration within renal adenocarcinomas is not an infrequent occurrence. In a reported series from the Mayo Clinic<sup>11</sup> of 579 surgically excised renal neoplasms, gross unilocular or multilocular cystic areas were observed in 24. In a few the cystic degeneration was considered to be so extensive that an origin within a pre-existing benign cyst was initially entertained. Although there were 10 examples of an association between tumor and cyst, in none of the cases was the tumor situated within the cyst itself. There are reports, however, of adenocarcinomas apparently arising within renal cysts.<sup>12</sup> The gross or microscopic differentiation between these unusual carcinomas and cystic degeneration within a neoplasm is ascertained with some degree of difficulty. Perhaps more significant is the relationship of unilateral and bilateral cystic kidney disease and renal cell carcinoma. Reports seem to indicate an increased incidence although the actual frequency rates have not been determined. Regan et al<sup>13</sup> reported that during follow-up hemodialysis two of 11 patients with polycystic kidneys developed clear cell carcinoma. In a

review of the literature, Regan et al<sup>13</sup> encountered 28 additional examples of renal malignancies occurring in polycystic organs. 17 were renal adenocarcinomas. Except for three sarcomas, the remainder were also epithelial in origin.

A more common association of renal cyst and neoplasm is provided by the simultaneous but separate existence of these two lesions within the same organ.<sup>14</sup> The cysts are usually peripheral and probably result from either tubular or vascular obstruction by the tumor. The incidence rate has been reported at 2% to 7%.<sup>15</sup>

Failure to detect malignant cells in bloody urine or by differential urine cytology as in this case, once again emphasizes the limitations of cytology in either establishing or excluding the presence of adenocarcinoma of the renal parenchyma. Contrary to a few optimistic reports,<sup>6</sup> of a fairly high diagnostic rate for urinary cytology in the detection of renal cell carcinoma, our experience has been that most do not shed cells into the urine. In fact, when a positive cytology for renal adenocarcinoma is encountered, the tumor is usually a large bulky mass which has grossly invaded the calyceal-pelvic collecting system.

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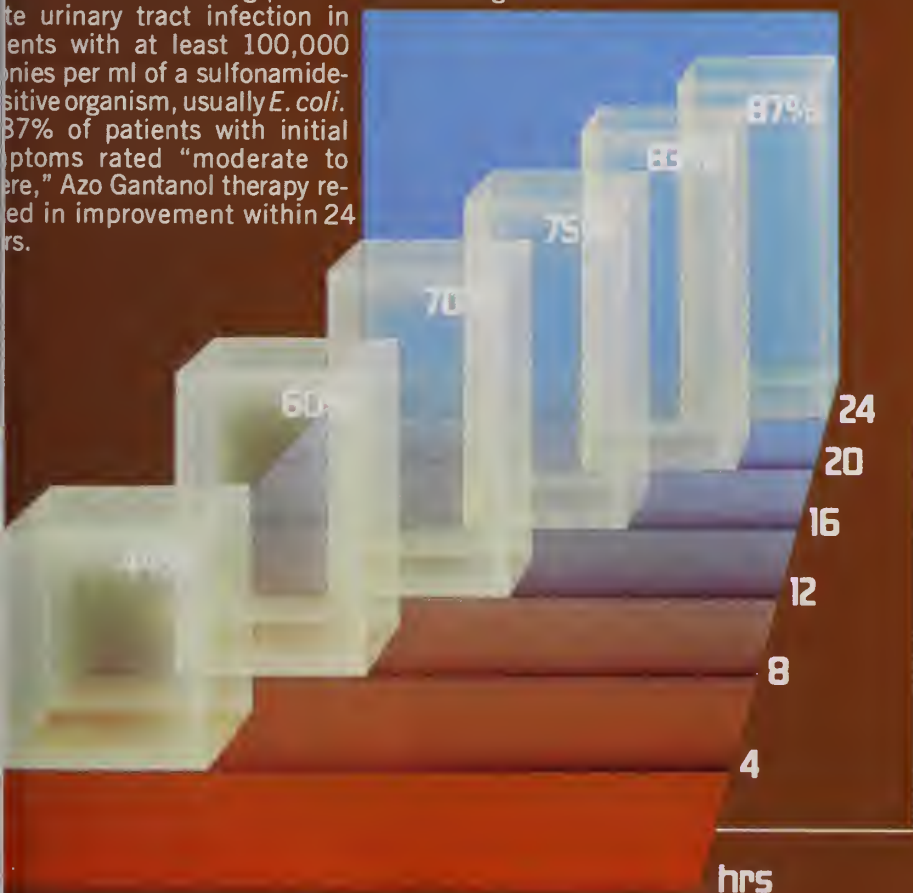
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Important data on the pain of acute cystitis:

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In a controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

**Azo Gantanol®**

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain the pathogens

on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

**Contraindications:** Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

**Warnings:** Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

**Dosage:** Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

**NOTE:** Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

**Supplied:** Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.



Roche Laboratories  
Division of Hoffmann-La Roche Inc.  
Nutley, New Jersey 07110





A reminder

# ZYLOPRIM<sup>®</sup>

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

**INDICATIONS AND USE:** This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim<sup>®</sup> (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease. Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

**In patients receiving Purlinethol<sup>®</sup> (mercaptopyrine) or Imuran<sup>®</sup> (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purlinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.**

**Usage in Pregnancy and Women of Childbearing Age:** Zyloprim<sup>®</sup> (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

## ADVERSE REACTIONS:

**Dermatologic:** Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

**Gastrointestinal:** Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

**Vascular:** There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

**Hematopoietic:** Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim<sup>®</sup> (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

**Neurologic:** There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

**Ophthalmic:** There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yu for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

**Drug Idiosyncrasy:** Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

**OVERDOSAGE:** Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

**HOW SUPPLIED:** 100 mg (white) scored tablets, bottles of 100 and 1000; 300 mg (peach) scored tablets, bottles of 30, 100 and 500. Unit dose packs for each strength also available.

Complete information available from your local B. W. Co. Representative or from Professional Services Department PML.

U.S. Patent No. 3,624,205 (Use Patent)



**Burroughs Wellcome Co.**  
Research Triangle Park  
North Carolina 27709

# COMPATIBILITY



## Does it influence your choice of a peripheral/cerebral vasodilator\*?

- Vasodilan—compatible with coexisting diseases
- Vasodilan—compatible with concomitant therapy
- Vasodilan—compatible with your total regimen for vascular insufficiency

\*Indications: Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

**Composition:** Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

**Dosage and Administration:** Oral: 10 to 20 mg., three or four times daily. Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

**Contraindications and Cautions:** There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

**Adverse Reactions:** On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

**Supplied:** Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836

# VASODILAN<sup>®</sup>

(ISOXSUPRINE HCl)  
20-mg tablets

**Mead Johnson** PHARMACEUTICAL DIVISION

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**When painful spasm  
is the presenting  
symptom...**



...in the functional bowel/irritable bowel syndrome\*

# Bentyl<sup>®</sup>

## (dicyclomine hydrochloride USP)

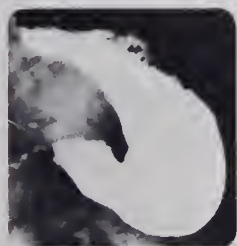
10 mg. capsules, 20 mg. tablets,  
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity  
with minimal anticholinergic side effects<sup>†</sup>

### Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*“The correlation of spasm relief and drug given was excellent.”*

\*This drug has been classified “probably” effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

# Merrell



# Bentyl<sup>®</sup>

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

#### INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSEAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage:** Bentyl 10 mg. capsule and syrup: **Adults:** 1 or 2 capsules or teaspoonfuls syrup three or four times daily. **Children:** 1 capsule or teaspoonful syrup three or four times daily. **Infants:** ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: **Adults:** 1 tablet three or four times daily. Bentyl Injection: **Adults:** 2 ml. (20 mg.) every four to six hours intramuscularly only. NOT FOR INTRAVENOUS USE. **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>®</sup> (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

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May 1979 • The Journal of



## EDITORIAL

### What's Good About Medicine?

**I**t seems as though the only newsworthy events regarding medicine these days are those that concern liability suits, the cost of medicine and impending governmental control of medicine in all its aspects. A recent example of this can be found in the lead editorial of the *Courier Journal* dated April 1, 1979, in which the author discusses catastrophic health insurance. Supporters of such catastrophic health insurance legislation would emphasize the need for protection of the American population against devastating medical expenses. Opponents of such legislation emphasize the danger of appropriating large sums of money for medical care without substantial reform in the delivery of such costs. Prevention of illness, so the opponents continue, should be paramount in any form of health legislation and the need for each individual to be concerned about his own health is implied.

A somewhat parallel article can be found in the April 5, 1979 issue of the *New England Journal of Medicine* in which Doctors James Gifford, Jr. and William Anlyan of Duke University discuss the role of the private sector in an economy of limited health care resources. These authors point out that "Most Americans feel that this country can provide adequate health care for all at an affordable cost . . ." despite the fact that ". . . we're now facing an era in which economic resources will be limited and in which we will have to live with more restraints than has been the case." In continuing paragraphs, the authors emphasize the need for physicians understanding the economics of health care, the public becoming aware of what medicine can and cannot do, the individual recognizing that he is ultimately responsible for his own health and welfare, and the need for exploring ways to provide financial incentives that encourage efficiency, reduce waste, and over-utilization of health resources.

And so the parade of problems continue—a true dilemma. It is refreshing, therefore, to pick

up an article that addresses itself to the positive aspects of medical practice in these United States. Such an article is in the special issue of the *Journal of the American Medical Association* dated March 30, 1979. This issue, entitled "Contempo" reviews by specialty some of the noteworthy aspects of medicine during the preceding year or so. Most of these innovations in the practice of medicine have unceremoniously been assimilated into everyday practice. When viewed, however, at one time, they certainly represent a most impressive list. Consider just a few of them:

- 1) developments in craniofacial surgery permitting extended operations for correction of congenital anomalies as well as a more advanced approach to the treatment of traumatic and malignant lesions of the head and face.
- 2) advances in hand surgery permitting replacement of digits or even extremities and permitting toe to thumb transfers.
- 3) improvements in the chemotherapy of oat cell carcinoma of the lung.
- 4) the development of new antineoplastic agents such as cisplatin.
- 5) improved diagnostic procedures such as echo cardiography and computer assisted tomography.
- 6) the development of vaccines against diseases such as hepatitis B, rabies, meningococci groups A and C and pneumococcus.

The parade of achievements is longer, but this brief listing points out the fact that there is a continual flow of new medical knowledge and methodology which should permit a better quality of life for the health consumer. Still there lurks in the background the fact that medical research costs money and health delivery costs money. Must we ration such resources or must we find ways so that every individual in this country can have access to them?

G.R.S.



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# V-Cillin K<sup>®</sup>

penicillin V potassium

is the most  
widely prescribed  
brand of oral penicillin



Tablets  
125, 250, and 500 mg\*  
Oral Solution  
125 and 250 mg\*/5 ml

## V-Cillin K<sup>®</sup> penicillin V potassium

**Description:** V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

**Indications:** For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

**Contraindication:** Previous hypersensitivity to penicillin.

**Warnings:** Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies

before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

**Precautions:** Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiopasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

**Adverse Reactions:** Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin.

[102175]

**\*Equivalent to penicillin V.**

*Additional information available to the profession on request.*



Eli Lilly and Company  
Indianapolis, Indiana 46206

900416





## ASSOCIATIONAL NEWS



### Nominations Being Accepted For Educational Achievement Award

The KMA is accepting nominations for the Educational Achievement Award which is presented annually to a citizen of the Commonwealth.

Nominees are chosen from those who have made a significant achievement in medical or medically related education in areas of research, clinical application of medical practice and/or patient education.

Nominations will be accepted from the Deans and faculty members of the medical schools, county medical and specialty societies and the general membership. Nominee material should include background and historical information about the nominee as well as justification for the nomination.

All nominations should be forwarded to the KMA Office by August 1. Recipients are chosen by the Medical Education Committee, and the Award will be presented during the Annual Meeting of the House of Delegates.

### Meeting of Kentucky Society of Internal Medicine to be held May 26th

The Kentucky Society of Internal Medicine will hold its annual meeting Saturday, May 26, at the Hyatt Regency Hotel in Louisville. A panel meeting from 1 p.m. to 4 p.m. will deal with the internist and third party problems. A cocktail hour banquet will be held that evening. For further information contact Clem Burnett, M.D., Mayfield, Kentucky (502) 247-8100.

### Report on April 1 Meeting of Ad Hoc Committee on Insurance Procedures

The Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement met April 1 in Louisville to consider issues raised in Resolutions L and Q passed by the House of Delegates in September.

Resolution L relates to Blue Shield participating physician agreements and Resolution Q raises questions concerning reimbursement for primary care services. Resolution L called for an open meeting where these subjects could be addressed.

In addition to the members of the Ad Hoc Committee, some 20 members were there to present their views on the contents of the resolutions as well as some other associated matters. The open meeting lasted approximately five hours and saw some frank discussions.

Everyone present had full opportunity to express his views, and all were asked to submit additional comments in writing if they wished for the Committee's consideration. The open meeting was taped and transcribed for record.

A two hour session of the Committee followed the open meeting where the resolutions were considered along with information presented earlier. Consensus was reached on some points and the need for further material was defined.

The Committee will meet again in the next few weeks, digest all the information considered and develop a report to be presented to the Delegates before the House meets again in September 1979.

### 20th Annual Ky. Occupational Medical Association Meeting

The 20th Annual Kentucky Occupational Medical Association Meeting will be held May 25, 1979, at the Hyatt Regency Hotel in Louisville.

Dedicated to the "care of employees in the work place," the meeting will include presentations by Morton Kasdan, M.D., a Louisville hand surgeon; Wilbur Mitchell, M.D., Louisville psychiatrist; and Glenn L. Schilling, Chairman of Kentucky Workman's Compensation Board.

The meeting will satisfy the criteria for six hours in Category I of the Physicians Recognition Award of the American Medical Association.

For further information, contact Gradie R. Rowntree, M.D., (502) 451-3844.

### COST CUT CORNER

#### MAY—Injudicious Use of Facilities Drive Cost Up

Improper use of emergency facilities have a tremendous impact on health costs. Stress to your patients that the emergency room is only for emergencies; that they should call you first if they are uncertain of the need for emergency room services.



## Members in the news

### NEW MEMBERS

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Pairoj Ruktananochai, M.D., Pikeville

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A. E. T. Thomsen, M.D., Mt. Vernon

### HONORS BESTOWED

John Newman, M.D., and Walter L. O'Nan, M.D., both from Henderson, Ky., were honored January 31 for their years of medical service to the community. Doctor Newman has practiced medicine in Henderson for 33 years; Doctor O'Nan for 48 years. A recognition dinner was given for them by the Henderson County Medical Society and the Board of Directors of Community Methodist Hospital.

Edward P. J. Todd, M.D., Ph.D., Lexington, has been selected as a Fellowship member in the American College of Cardiology (ACC). The announcement came from Jacqueline A. Noonin, M.D., Lexington, the ACC Governor for the state of Kentucky.

### RICHMOND, KENTUCKY—

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## Headquarters Activity

### APRIL

- 1 Resolution L, Louisville
- 1-2 AMA Regional Conference Meeting, New Orleans
- 2 School Health, Lexington
- 2-3 Medical Aspects of Sports Seminar, Lexington
- 4 LRC Subcommittee on Regulations, Frankfort  
Kempac Board, Louisville  
Board of Trustees, Louisville  
Physician's Health, Louisville
- 10 *Journal* Editor, Louisville
- 16 JCMS Pollution Conference, Louisville
- 18 4th District Trustee Meeting, Elizabethtown
- 19 Health Planning Meeting, Frankfort
- 18-21 32nd National Conference on Rural Health,  
St. Paul
- 19-20 Paramedic Exams, Louisville
- 24 Auxiliary Annual Meeting, Louisville
- 24-25 New Physician Workshop, Louisville
- 26 Interspecialty Council, Louisville  
Licensure Board, Louisville  
Office Manager Workshop, Louisville

### MAY

- 1 13th District Trustee Meeting, Ashland
- 2-4 Para Medic Advisory Committee, Louisville
- 6 AAMSE Board, Louisville
- 8 10th District Trustee Meeting, Lexington  
*Journal* Editors, Louisville
- 9 Kentucky Chapter AAMA, Louisville
- 10 Maternal and Child Care Meeting, Louisville  
Medicaid Projections Committee, Frankfort
- 15 CME Site Visit, Louisville  
Good Samaritan Site, Lexington
- 17 RKMSF Annual Meeting, Louisville
- 24 CME Committee Meeting, Louisville  
Medicaid Projections Committee, Frankfort
- 29 State Primary

### JUNE

- 6-7 Emergency Medical Care Seminar, Louisville
- 7 LCCME Meeting, Chicago
- 13 McDowell Fund Raising Committee, Danville

## KMA ANNUAL MEETING

September 24-27, 1979

Ramada Inn/Bluegrass  
Convention Center  
Louisville, Kentucky

**Tenuate®**  
(diethylpropion hydrochloride NF)

**Tenuate Dospan®**  
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

#### Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSEAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.  
Cayey, Puerto Rico 00633

Direct Medical Inquiries to  
MERRELL-NATIONAL LABORATORIES  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

# Merrell

8-3921 (Y587A)



**Whether overweight is a  
complicating factor...  
or just uncomplicated overweight.**

# **Tenuate<sup>®</sup> Dospan<sup>®</sup> <sup>IV</sup>** **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

## **A useful short-term adjunct in an indicated weight loss program.**

Overweight patients in certain diagnostic categories often require strict obesity control. Diethylpropion hydrochloride has been reported useful in obese patients with hypertension, symptomatic cardiovascular disease, or diabetes. While it is not suggested that Tenuate in any way reduces these complications in the overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. (Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.)

## **In uncomplicated obesity.**

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

## **Clinical effectiveness.**

The anorexic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.<sup>1</sup> And the unique chemistry of Tenuate provides "...anorexic potency with minimal overt central nervous system or cardiovascular stimulation."<sup>2</sup> Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.  
And it's responsible medicine.**

# **Merrell**



For prescribing information see opposite page

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Apr



# In Edema\* or Hypertension\* when potassium balance is a concern...

## Potassium-Sparing **DYAZIDE®**

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

### Makes Sense

#### In Edema

The triamterene in 'Dyazide' limits potassium loss and provides an additive diuretic effect to that of the hydrochlorothiazide component.

#### In Hypertension

As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the triamterene component limits potassium loss.

#### Serum K<sup>+</sup> and BUN should be checked periodically

particularly in the elderly, diabetics, and those with suspected or confirmed renal insufficiency (see Warnings). If hyperkalemia develops, substitute a thiazide alone.



Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

#### \* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K<sup>+</sup> frequently; both can cause K<sup>+</sup> retention and elevated serum K<sup>+</sup>. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Anti-hypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

**SK&F CO.**  
a SmithKline company

**SK&F CO.**  
Carolina, P.R. 00630





# EMPIRIN<sup>®</sup> COMPOUND c CODEINE

Each tablet contains aspirin 227 mg, phenacetin 162 mg, and caffeine 32 mg, plus codeine phosphate in one of the following strengths: \*4—60 mg (gr 1), \*3—30 mg (gr 1/2), \*2—15 mg (gr 1/4), and \*1—7.5 mg (gr 1/8). (Warning—may be habit forming.)



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All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.

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ESTILL HEALTH CARE, INC., KY. Immediate long-term need for primary care physicians. GP/FP to serve on medical staff. Competitive salary, fringe benefits, plus paid malpractice. Must be eligible for Ky. licensure. For more information call Larry Hershenson, Executive Director, (606) 723-5178.

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MEDICAL OFFICER, LOUISVILLE, KENTUCKY. Disability Evaluation. Excellent position for physician seeking slower pace. Substantial salary. No malpractice problems. Position is in Federal career civil service with attractive fringe benefits. Veterans Administration Regional Office, downtown Louisville. Equal Opportunity Employer. Contact Personnel Officer, 600 Federal Place, Louisville, Ky. 40202 (502) 582-5135.

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Members of the Kentucky Medical Association reading papers before other organizations are asked to submit their papers to *The Journal* for consideration by the Editors for publication. Detailed instructions to contributors appear in the Scientific Section of *The Journal* under Manuscript Memos. Please forward any papers to:

Paul C. Grider, Jr., M.D., Scientific Editor  
The Journal of the Kentucky Medical Association  
3532 Ephraim McDowell Drive  
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# HOW MUCH OF YOUR TIME CAN YOU CALL YOUR OWN?

Modern medical practice has become a complex and time-consuming operation. Too often the physician sacrifices leisure time and family responsibilities to his professional duties.

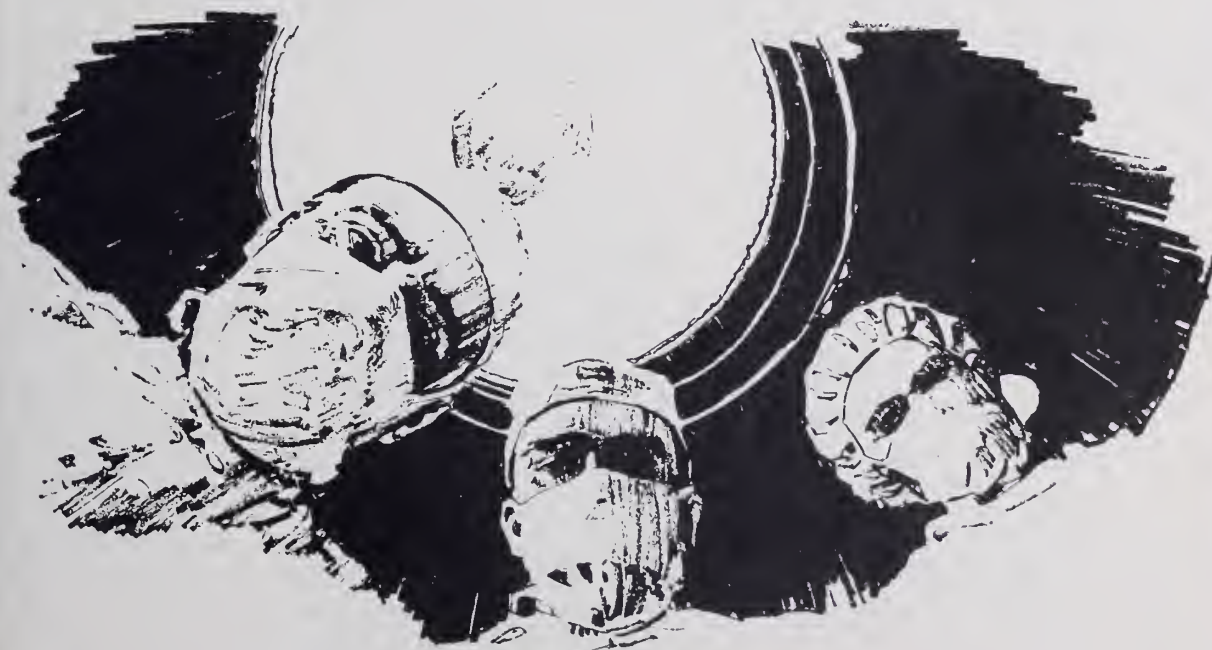
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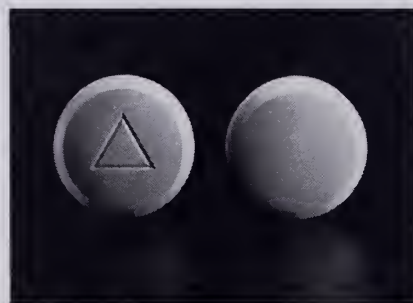
**AIR**  
**FORCE**

# The Make

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.



*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were**

not bioequivalent to reference product. As you know, there is substantial literature on this subject affecting many drugs including such antibiotics as tetracycline and erythromycin. The record of drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do not. Research and may provide a minimum quality assurance.

*MYTH: Industry favors only "expensive" brand names and denigrates generics.*

**FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.**



# Matters.

*Generic options always exist.*

About 55 percent of prescription drug expenditure is for single-drug products. This is, of course, that for 5 percent of such expenditure, is a generic prescribing option available.

*Generic prescriptions are filled with expensive generics, thus saving consumers large sums of money.*

Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically equivalent products from the same manufacturer and trusted sources, in the best interest of the patient receives the best brand product. Savings from voluntary substitution of generic prescribing are grossly exaggerated.

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT:** Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT:** Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

## The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

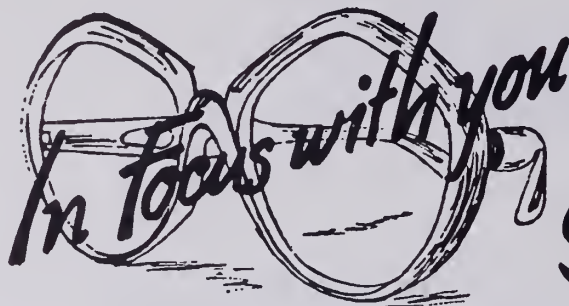
## The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

# PMA

Pharmaceutical Manufacturers Association  
1155 Fifteenth Street, N.W.  
Washington, D.C. 20005





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|                      | Doctors Bldg.                                | 1001 Center Street     | 684-1508 |
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## HEARING AIDS

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**June 6-7, 1979 Ramada Inn/Bluegrass Convention Center**  
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For information contact: KMA, 3532 Ephraim McDowell Drive  
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# Application for Scientific Exhibits

1979 Annual Meeting

Ramada Inn/Bluegrass Convention Center

Kentucky Medical Association

Louisville, Kentucky

September 25, 26, 27

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before July 1, 1979.

## ACCREDITATION



KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category 4 credit.

1. Title of exhibit \_\_\_\_\_
2. Name(s) of exhibitor(s) \_\_\_\_\_  
Address \_\_\_\_\_  
Professional title \_\_\_\_\_
3. Institution if other than exhibitor \_\_\_\_\_
4. Amount of backwall footage required \_\_\_\_\_  
(The draped booth has 4' side walls. This footage should not be included in backwall footage required.)  
SHELF DESIRED? \_\_\_\_\_ (Shelf is 2' deep X width of backwall footage)
5. Will summary printed matter be available or obtainable for the interested physician? \_\_\_\_\_
6. Indicate sources of assistance provided to you in connection with this exhibit \_\_\_\_\_
7. Has this exhibit been displayed before? If so, when & where? \_\_\_\_\_
8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date \_\_\_\_\_

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Fill Out and Mail to:

 **RICHARD A. KIELAR, M.D., Chairman**  
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Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205 

- KMA provides, without cost to the exhibitor, simple shelves, bracket lights and a title sign.
- Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202
- Transportation and erection costs are the responsibility of the exhibitor.
- Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.
- Equipment which will create noise should not be used during the general sessions and, at other times, should be controlled by head or earphones or a muffling device.



# KMA

## Annual Meeting

### September 24-27

### 1979

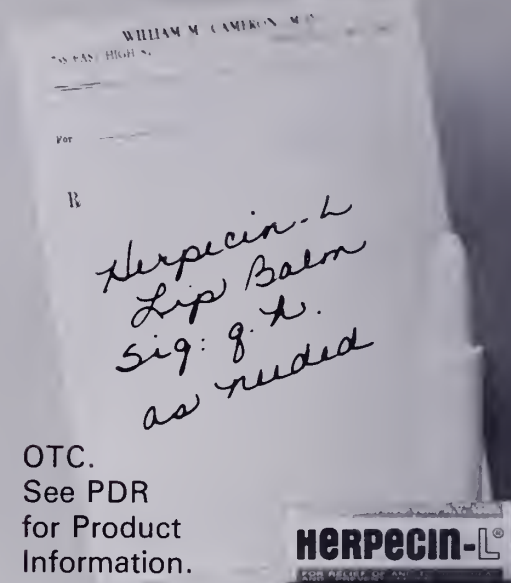
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## CHANGE OF ADDRESS

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**Dx: recurrent  
herpes labialis**



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I do want.  
I do think.  
I do feel.**

The President's Committee on Employment of the Handicapped

# For recurrent attacks of urinary tract infection in women

## Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

### Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage:** For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonia. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (Federal Register, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

**Urinary Tract Infections:** Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older:*

| Weight |     | Dose—every 12 hours |                          |
|--------|-----|---------------------|--------------------------|
| lbs    | kgs | Teaspoonfuls        | Tablets                  |
| 20     | 9   | 1 teasp. (5 ml)     | ½ tablet                 |
| 40     | 18  | 2 teasp. (10 ml)    | 1 tablet                 |
| 60     | 27  | 3 teasp. (15 ml)    | 1½ tablets               |
| 80     | 36  | 4 teasp. (20 ml)    | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30                      | Usual standard regimen     |
| 15-30                         | ½ the usual regimen        |
| Below 15                      | Use not recommended        |

***Pneumocystis carinii* pneumonia:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** *Double Strength (DS)* tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. *Oral suspension*, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



Her next attack of cystitis may require

# the Bactrim<sup>TM</sup> 3-system counterattack



Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has no significant effect on other normal, necessary intestinal flora.

## Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.



June 1979  
Volume 77  
Number 6

KMIC Capitalizes

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JUN 45 1979

# The Journal Of The Kentucky Medical Association

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## LIBRIUM® chlordiazepoxide HCl/Roche THE ANXIETY-SPECIFIC

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Relief of anxiety and tension occurring alone or accompanying various disease states. Efficacy beyond four months not established by systematic clinical studies. Periodic reassessment of therapy recommended.

**Contraindications:** Patients with known hypersensitivity to the drug.

**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malforma-

tions as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

**Supplied:** Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



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# MESSAGE FROM THE PRESIDENT

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## KMIC Capitalizes

**Y**our Association takes pride in announcing the operational status of the Kentucky Medical Insurance Company. Our own physician-owned and controlled company is now ready to serve the physicians of this state.

All of us should be proud of this accomplishment of organized medicine over the last few months. When the commercial insurance carriers were unable to meet our professional liability insurance needs, we decided to do something about it, and we did it ourselves. We didn't look to government or other entities to solve our problem. We set upon a course of action, within our own profession, that has resulted in our having established control of this facet of our professional lives.

Every Kentucky physician should stand taller now that we have demonstrated what collective action can produce. KMIC now stands a perfect example of what we can achieve when, together, we set our hands to a task.

We extend our sincere appreciation to the many physicians who have purchased stock and rendered many other valuable services to KMIC in its formative stages. Your support has enabled us to become operational now. To those of you who have not yet purchased stock, we urge your participation. Although our stock sales have reached the point of capitalization (\$1.24 million), our stock offering is for \$3 million. We need to sell our entire issue as this will enable KMIC to serve Kentucky physicians in even a greater way. Be a part of this exciting concept and help ensure physicians in this state of continuing market availability.

CARL COOPER, M.D.  
KMA President

## POSTGRADUATE OPPORTUNITIES

### IN KENTUCKY

#### MAY

- 23 Problems of Sepsis, University of Louisville Health Sciences Center
- 23-24 General Topics in Alcoholism, Executive Inn
- 25 Ky. Occupational Medical Association, Hyatt Regency

#### JUNE

- 6-7 9th Annual Emergency Care Seminar, 4th Annual Emergency Medical Services Seminar (KMA), Ramada Inn, Hurstbourne Lane
- 10-15 4th Family Medicine Review,\* Galt House
- 19 The Biochemical Basis of Psychiatric Illness and Therapy, Highlands Baptist Hospital

#### JULY

- 18-19 KAFP Scientific Meeting, Owensboro
- 25 Physician Responsibilities in High School Athletics, Health Sciences Center

#### SEPTEMBER

- 24-27 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

#### OCTOBER

- 17-18 Hypertension 1979,\*\*
- 20 Kentucky Regional Meeting, American College of Physicians, Hyatt House, Louisville

#### NOVEMBER

- 11-16 1st Annual Family Medicine Update, Hyatt House, Louisville. For information call (502) 588-6185

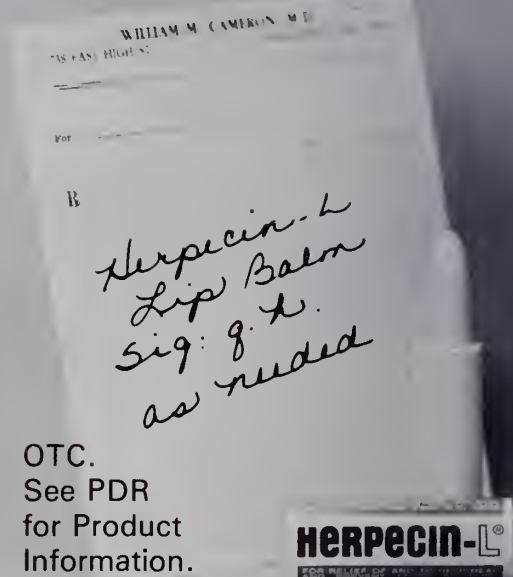
#### DECEMBER

- 7-8 Renal Failure\*\*

\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

\*\*For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

## Dx: recurrent herpes labialis



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In Edema\* or Hypertension\* when potassium balance is a concern...

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Each capsule contains 50 mg. of Dyrenium<sup>®</sup> (brand of triamterene) and 25 mg. of hydrochlorothiazide.

## Makes Sense

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The triamterene in 'Dyazide' limits potassium loss and provides an additive diuretic effect to that of the hydrochlorothiazide component.

### In Hypertension

As the hydrochlorothiazide in 'Dyazide' lowers blood pressure, the triamterene component limits potassium loss.

### Serum K<sup>+</sup> and BUN should be checked periodically

particularly in the elderly, diabetics, and those with suspected or confirmed renal insufficiency (see Warnings). If hyperkalemia develops, substitute a thiazide alone.



Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

#### \* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

**Contraindications:** Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

**Warnings:** Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K<sup>+</sup> levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K<sup>+</sup> intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available.

**Precautions:** Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K<sup>+</sup> frequently; both can cause K<sup>+</sup> retention and elevated serum K<sup>+</sup>. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Anti-hypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

**Adverse Reactions:** Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

**Supplied:** Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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is the presenting  
symptom...**





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# Bentyl<sup>®</sup>

## (dicyclomine hydrochloride USP)

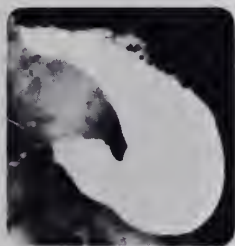
10 mg. capsules, 20 mg. tablets,  
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity  
with minimal anticholinergic side effects†

### Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

\*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

# Merrell



# Bentyl<sup>®</sup>

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

#### INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache, nervousness, drowsiness; weakness; dizziness; insomnia, nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage.** Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 mL (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>®</sup> (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Ocaturo, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

## Merrell

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# ALDOMET<sup>®</sup>

(METHYLDOPA/MSD)

TABLETS: 500 mg, 250 mg, and 125 mg



MSD  
MERCK  
SHARP  
DOHME

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## Non-Steroidal Anti-Inflammatory Drugs: Use in Rheumatic Diseases

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The purpose of this article is to review the practical aspects of using non-steroidal anti-inflammatory drugs, including aspirin, in the treatment of some common rheumatic disorders. We give information on dosages available, important side effects, and relative costs to the patient. We also emphasize a rationale for using these agents in cases of incomplete response to salicylates.

Aspirin has long been the mainstay of treatment for rheumatological disorders. While it remains an efficacious drug, introduction of newer nonsteroidal anti-inflammatory drugs (NSAIDs) has given the physician an alternative for those patients unable to tolerate aspirin. The purpose of this article will be to briefly review the clinical aspects of using these agents in the more common rheumatic diseases. In addition to aspirin, indomethacin and phenylbutazone and five of the newer NSAIDs will be discussed.

There have been many hypotheses to explain why anti-inflammatory drugs interfere with inflammation. Currently it is felt that inhibition of prostaglandins plays an integral role in the anti-inflammatory effect of these drugs. Prostaglandin's part in inflammation seems to be that of potentiating the inflammatory response by causing vascular permeability, vasodilatation, etc. By

blocking prostaglandin synthetase, which converts fatty acids to prostaglandins, the NSAIDs can interfere with some of the positive feedback loops of inflammation.<sup>1,2</sup>

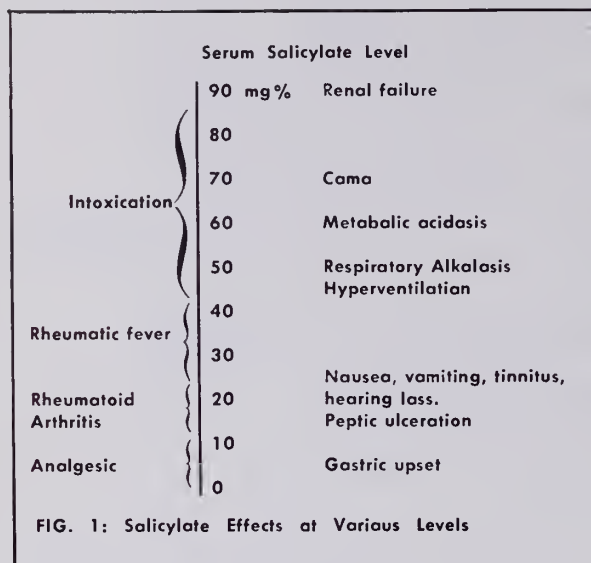
### Aspirin

Acetylsalicylic acid (ASA or aspirin) is the best anti-inflammatory, analgesic agent of the salicylates. There are other forms of salicylate which have various advantages, such as longer duration of action or fewer gastro-intestinal side effects. The plain ASA comes in 5 grain or 325 mg size. Buffered aspirin, such as Ascriptin® or CAMA®, seem to be better tolerated by patients complaining of gastrointestinal problems than plain ASA, although there is no concrete evidence for this in the literature. Coated ASA (Ecotrin®) also boasts fewer gastrointestinal side effects but may be limited in effectiveness because of poor or erratic absorption. Salts of salicylic acids such as choline magnesium trisalicylate (Trilisate®) supposedly have fewer gastrointestinal side effects and a longer duration of action requiring only a bid dosage, but no conclusive studies have shown its efficacy in rheumatic diseases.<sup>3</sup>

To treat an inflammatory arthritis, a full anti-inflammatory dosage of aspirin must be given. This usually corresponds to 12 to 16 five grain tablets per day in at least four divided doses, preferably given after meals and at bedtime. This is increased gradually (e.g. once or twice a week) until the patient gets relief or tinnitus. Since tinnitus often develops at about the same level as that needed for a full anti-inflammatory effect (Figure 1), the aspirin is slowly tapered if this

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occurs. This may be a matter of reducing the aspirin by only one or two tablets before the tinnitus disappears; at that point the patient's dosage may be maintained. Serum salicylate levels are not routinely necessary, but are helpful to obtain in children, in unreliable patients, or in the patient who is not responding to treatment as the physician would expect. This level may be drawn one hour before the noon or evening dose and should be between 20-25 mg%.<sup>4</sup>

The most common side effects are gastrointestinal symptoms, tinnitus and hearing loss. All patients on ASA will have a small amount of gastric mucosal irritation, and some may even have frank ulceration and hemorrhage. Studies have shown that some of the ulcerogenic effects of salicylates can be prevented by the use of cimetidine, although such use is not routinely recommended.<sup>5</sup> Tinnitus and hearing loss is usually reversible with a decrease in the dosage. Aspirin also decreases platelet aggregation and interferes with the synthesis of some of the clotting factors. There may be drug interactions with ASA which potentiate the effects of Dilantin®, Coumadin® and some of the oral hypoglycemics. Diminished renal function has been noted in some patients with lupus nephritis possibly related to prostaglandin synthetase inhibition.<sup>6</sup> Hypersensitivity to aspirin may occur in the form of respiratory problems such as bronchoconstriction or mucosal swelling, especially in patients with bronchial asthma or nasal polyps.

#### Indomethacin

Indocin®, available in 25 mg and 50 mg tablets, may be useful in several rheumatic dis-

orders. Long-term administration for rheumatoid arthritis, osteoarthritis, and ankylosing spondylitis may be instituted by starting at a moderate dosage of 25 mg tid and increasing slowly to a daily maximum of 200 mg total, if needed. Thereafter the patient's dose should be tapered to the lowest amount which still gives adequate anti-inflammatory effect.

Indomethacin is also useful in the treatment of acute gouty arthritis. In this case 150 mg may be given initially. This is followed by 100 mg qid, tapered to 25 mg qid, then discontinued over three or four days' time.

Some physicians use this drug successfully as an evening dosage for rheumatoid arthritis. Because of its longer duration of action, there may be less night pain and morning stiffness; few side effects have been encountered with this method of administration. Indomethacin is also being used with good results for the therapy of acute and chronic pseudogout, some cases of non-articular rheumatism, and selected patients with Reiter's syndrome.

The major side effects of indomethacin involve the gastrointestinal tract and the central nervous system. Gastritis and its complications is probably more severe than with aspirin; taking Indocin® with or after meals may prevent or allay symptoms due to upper gastrointestinal effects. In fact this cautionary note should probably be sounded for all the NSAIDs, including ASA. Ileal ulceration and colonic hemorrhage have been reported with indomethacin use; it is therefore contraindicated in all patients with a history of lower gastro-intestinal disease.<sup>3</sup>

With regard to the central nervous system, morning headache is a common side effect. Decreasing the dosage by one tablet a day may alleviate the problem; thereafter it is sometimes possible to raise the dose to the original level without further difficulty. This drug may cause depression and psychosis, the latter not always reversible. It is contraindicated in patients with epilepsy, cerebrovascular or other brain disease, and relatively contraindicated in the elderly.<sup>7</sup> As with other NSAIDs, crossover sensitivity between ASA and indomethacin has been reported.

#### Phenylbutazone

Phenylbutazone (Butazolidin®) is similar to indomethacin in its anti-inflammatory activity, and is also useful in acute inflammations, such as gout, bursitis, and the HLA-B27-positive "vari-



| Drug                     | Daily Maintenance Dose | Cost/Year |
|--------------------------|------------------------|-----------|
| ASA (generic)            | 16 tab                 | \$ 18- 36 |
| Buffered ASA (generic)   | 16 tab                 | \$ 50- 98 |
| Ascriptin®               | 16 tab                 | \$ 79-115 |
| ECASA (generic)          | 16 tab                 | \$ 68- 72 |
| Ecotrin®                 | 16 tab                 | \$ 79-115 |
| Indocin®                 | 25 mg t.i.d.           | \$119-137 |
| Butazolidin®             | 100 mg b.i.d.          | \$ 79- 86 |
| Phenylbutazone (generic) | 100 mg b.i.d.          | \$ 54     |
| Butazolidin Alka®        | 100 mg b.i.d.          | \$ 86     |
| Motrin®                  | 800 mg t.i.d.          | \$281-302 |
| Tolectin®                | 400 mg t.i.d.          | \$259-324 |
| Nalfon®                  | 600 mg q.i.d.          | \$259-302 |
| Naprosyn®                | 250 mg b.i.d.          | \$173-202 |
| Clinoril®                | 200 mg b.i.d.          | \$248-270 |

TABLE I. Composite Price List for 3 Drug Store Chains in Louisville, Kentucky—1979.

ants." It is available in 100 mg tablets and in a buffered form (Butazolidin Alka®). The maximum daily dose is 800 mg a day. For chronic administration, for example in ankylosing spondylitis, one might start at 100 mg bid and increase to the maximum dosage or until a response is obtained. CBC's must be monitored closely, especially at the higher levels. Again it is best to maintain the patient on as low a dosage as possible. For acute situations (e.g. gout) one may give 200 mg initially and up to 600 mg in the first 24 hours. The dosage is tapered and discontinued in the next three to five days.

The main toxicities are gastrointestinal intolerance, bone marrow suppression and fluid retention. The marrow depression is usually related to dosages greater than 300 mg a day, and may be acute or insidious; fatalities have been reported. Because of fluid retention, patients with congestive heart failure or hypertension must be watched closely. Phenylbutazone inhibits platelet aggregation and can displace coumarins and the sulfonyleureas from serum albumin, resulting in an increase in the effective levels of those drugs.<sup>3</sup>

#### Newer NSAIDs

The newer NSAIDs are alternatives to aspirin. Although their anti-inflammatory effect does not seem to be superior to that of aspirin, their main selling point is fewer gastrointestinal side effects. Their drawbacks lie in the expense of maintaining a patient, especially on a long term basis on a drug possibly ten times as expensive as aspirin (Table I), and in the lack of clinical experience.

Three of the drugs are propionic acid derivatives: ibuprofen (Motrin®), fenoprofen (Nalfon®) and naproxen (Naprosyn®). Tolmetin (Tolectin®) is a pyrrole compound resembling

indomethacin. Sulindac (Clinoril®) is an indene derivative. All five drugs are anti-inflammatory as well as analgesic and antipyretic. Only Tolectin has been approved for use in children, although there are studies underway on the others. All are contraindicated in pregnancy. All are released for use in rheumatoid arthritis and osteoarthritis, although Clinoril has also been approved for use in acute gouty attacks, bursitis and ankylosing spondylitis. The others have been used to some extent for these problems and will probably be officially cleared for such usage.<sup>8</sup>

The side effects and toxicities of these NSAIDs are somewhat similar. They all have cross-sensitivity with aspirin, and their main toxicity is gastrointestinal irritation and ulceration, but to a lesser extent than aspirin. Tolectin has been implicated in lower gastrointestinal bleeding.<sup>9</sup>

All five drugs prolong the bleeding time and interfere with platelet function. Since these drugs are protein-bound they have the potential for displacing such drugs as Dilantin, coumarins and sulfonyleureas from serum albumin, and should be used with caution in combination. Because various ophthalmological side effects have been noted, appropriate checkups have been suggested for all five drugs. Hepatotoxicity has been reported especially in Nalfon and Clinoril, in which periodic liver function studies should be obtained. Impaired renal function has been described, and reduction in the dosage of Tolectin, Naprosyn and Clinoril in renal failure is recommended. Peripheral edema has been seen and therefore patients with congestive heart failure or hypertension must be observed closely. Other persistently noted complaints are rash, pruritis, headache, dizziness, somnolence, tinnitus, reversible hearing loss and nervousness. Agranulocytosis has been sporadically reported in all but Clinoril.<sup>10</sup>

The dosage and frequency of administration varies according to the drug (Table II). Motrin is usually given on a tid or qid basis starting with 1200 to 1600 mg a day. This may be increased to a maximum of 2400 mg per day. Motrin has been on the market the longest of the five drugs, and there has been more experience with it. For that reason, it is the drug of choice for many practitioners after ASA. Tolectin is usually started at 400 mg tid. The maximum dosage is 1800 mg. Nalfon may be started at 300 or 600 mg qid depending on the severity of the inflammation and increased to 3200 mg. Naprosyn has the advan-

| Drug                    | Size Available | Starting Dose     | Maximum Dose Per Day |
|-------------------------|----------------|-------------------|----------------------|
| Motrin® (ibuprofen)     | 300/400 mg     | 300/400 mg q.i.d. | 2400 mg              |
| Tolectin® (tolmetin)    | 200 mg         | 400 mg t.i.d.     | 1800 mg              |
| Nalfon® (fenofen)       | 300/600 mg     | 300 mg q.i.d.     | 3200 mg              |
| Naprosyn® (naproxen)    | 250 mg         | 250 mg b.i.d.     | 750 mg               |
| (sulindac)<br>Clinoril® | 150/200 mg     | 150 mg b.i.d.     | 400 mg               |

TABLE II. Some Newer NSAIDs and Their Dosages

tage of requiring a bid dosage. Initially 250 mg bid is given but one may increase to 750 mg. Clinoril is also given twice daily, either 150 or 200 mg bid. Because Clinoril is a newcomer to the market, there has been the least experience with it. The maximum response rate in these drugs is longer than that of aspirin: it may take anywhere from a few days to four weeks for the newer NSAIDs to reach their peak effect.

#### Choosing A NSAID (Figure 2)

Aspirin is still our first drug of choice both because of its good anti-inflammatory effect and low cost; its side effects and toxicities are well worked out and understood as compared to some of the newer drugs. Exceptions to aspirin as the drug of choice are in patients with gouty arthritis or with a severe course or flare of ankylosing spondylitis or Reiter's syndrome. In these cases a better choice would be phenylbutazone or indomethacin. Clinoril has been released for any of these situations, and many of the other new NSAIDs have been tried and will probably be officially released for such use.

But other than these exceptions, when and how do we use the NSAIDs? The physician may consider a newer NSAID in two particular situations: a) when the patient cannot tolerate aspirin or b) if a maximum dose of aspirin doesn't give an adequate response.

If the patient cannot tolerate ASA, any of the five may be tried, usually in a starting dose and progressing to the maximum dose if necessary. Because our experience with Motrin is greatest, we might start with 400 mg qid for two weeks and move up to 800 mg tid if response wasn't adequate. One must remember to give a sufficient trial to any of the drugs, (two to four weeks), before deciding the drug is a failure. If the response to Motrin is inadequate another drug should be tried. Because one drug doesn't work does not

| Chronic Arthritis   | ARTHRITIS  | Use:  |
|---|--|---|
|   | Acute arthritis<br>B27 variant<br>arthritis                          | Indocin<br>Butazolidin<br>Etc.                    |
|   | ASA  |   |
|   | If no response or<br>if contraindicated or<br>if severe side effects | If inadequate response or<br>if mild side effects |
| Stop ASA<br>Use: Motrin<br>Tolectin<br>Nalfon<br>Naprosyn<br>Clinoril | Reduce ASA to moderate dosage<br>Add another NSAID                   |   |

FIG. 2. Choosing A NSAID.

mean one of the others might not. Different individuals respond to different drugs.

In the second instance the patient may only partially respond to ASA at maximum levels. A better response might be obtained by decreasing the ASA to a moderate dosage and adding another NSAID in the same manner as previously outlined. Studies have shown that while not fully additive, a combination of the two drugs may be better than one alone.

Although these newer NSAIDs are not miraculous in their capabilities, they have proved to be a significant addition to our therapeutic armamentarium. Careful attention to the increased costs and potential side effects, balanced with judicious expectations in their usage, can result in valuable advantages in the treatment of rheumatic diseases.

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# A Clinical Approach to the Choice of Antimicrobial Usage, Case Number Six: Fever and Petechiae

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This is the sixth in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choices of antimicrobial agents and explanations of why the authors choose one as the best agent.

IN June 1978 a 19-year-old white male presented to the emergency room with complaints of fever, severe frontal headache, nausea and vomiting, diffuse myalgias and photophobia. He had been ill for three days and had begun to develop a rash the morning before seeking medical assistance. On physical examination his temperature was 104°F and there was nuchal rigidity with a positive Kernig's sign. There was no adenopathy and lungs were clear to percussion and auscultation. The spleen tip was palpated just below the left costal margin and was mildly tender. He had a maculopapular cutaneous eruption involving the distal portions of his extremities with lesser numbers of newer lesions over more proximal areas (anterior thighs, shoulders, thorax and abdomen). Several of the peripheral lesions appeared to be assuming a petechial character and these were seen on the palms of the hands and the soles of the feet. The WBC count was 8,000/mm<sup>3</sup>, with 89% neutrophils, 8% bands and 3% lymphocytes; platelet count 94,000/mm<sup>3</sup>, BUN 24 mg/dl, and serum sodium 123 meq/L. The SGOT, SGPT, LDH and serum bilirubin were all mildly elevated, as were the partial thromboplastin and prothrombin times. Fibrin degradation products were present in the

serum at a 1:16 dilution. Each of the following factors would be of value in attempting to establish a correct diagnosis in this patient *except*:

- A. Lumbar puncture
- B. History of camping and insect bites
- C. History of possible exposure to other individuals with infection.
- D. Chest x-ray and electrocardiogram
- E. Weil-Felix agglutination titers

**Answer: E.**

The patient was admitted to hospital and further history revealed that he had recently been camping in the woods of Eastern Kentucky and had removed several ticks from his body during the trip. He had not had recent contacts with individuals known to have been ill. Rocky Mountain spotted fever (RMSF) is endemic to the South-Central and Southeastern areas of the United States.<sup>1,2</sup> The vector which most commonly transmits this disease to man in these areas of the country is *Dermacentor variabilis*, the dog tick. Because of the breeding habits of this tick, RMSF is most commonly seen from late spring to early autumn<sup>3,4</sup>. A lumbar puncture was performed and revealed a mild cerebrospinal fluid (CSF) pleocytosis, mild hypoglycorrhachia and an elevation in the CSF protein. Chest x-ray revealed diffuse bilateral pulmonary infiltrates and small bilateral pleural effusions. Electrocardiogram showed first-degree atrioventricular block and nonspecific ST-T abnormalities. Serum was drawn and sent for a Weil-Felix agglutination test and Rocky Mountain spotted fever complement fixation titer. Neither test will be helpful in the acute diagnosis of RMSF. The Weil-Felix agglutination titers, when positive, are not specific for RMSF, are only positive in about one-half of cases, and titers do not begin to rise until the second or third week of the disease. The RMSF complement fixation antibody titers almost invariably become positive in all cases of the disease but these do not begin to rise until the second or third week of illness. These are therefore of

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retrospective, but not therapeutic value. Since therapy will seldom be effective unless instituted within several days after the onset of symptoms this does not aid in the decision of when and with what to begin treatment.

Clinical features of RMSF which deserve consideration are as follows. The cutaneous eruption usually begins distally on the extremities and spreads to the central areas of the body. It often involves the palms of the hands and soles of the feet and may become petechial and occasionally ecchymotic. The differential diagnosis between RMSF and meningococcemia or meningococcal meningitis may be extremely difficult since many patients with RMSF also have clinical signs and symptoms of meningitis combined with abnormalities of the CSF.<sup>5</sup> An inappropriate ADH secreting state with resultant hyponatremia may also occur. Hepatitis, myositis, myocarditis, pneumonitis and often, disseminated intravascular coagulation are found in RMSF. Clinical and laboratory parameters related to each of the above entities were seen in the patient described. Other possible differential diagnoses include a variety of viral illnesses. The most common of these is rubeola (measles) or measles encephalitis, although in this the rash appears first on the face and trunk and spreads centrifugally as does the meningococcal eruption. However, adult onset measles often presents in an atypical fashion, particularly if the individual has been immunized previously. When this occurs the rash may more closely resemble that of RMSF. Since either meningococcal infection or RMSF can be rapidly progressive, fulminant and fatal diseases, therapeutic intervention should not be delayed until the diagnosis has been definitively confirmed. This patient should therefore be begun on therapy with

**in the cerebrospinal fluid and should not be used in the treatment of any patient suspected of meningitis and although cefoxitin may get into the cerebrospinal fluid there is insufficient evidence to warrant its use even in patients with meningococcal infection. In addition, the cephalosporins are ineffective against RMSF. All aminoglycosides including gentamicin would be inappropriate as they have no activity against rickettsiae and also do not get into the cerebrospinal fluid.**

RMSF can be treated effectively with either tetracycline (25 mg/kg per day) or chloramphenicol (50 mg/kg per day). No other antibiotics are particularly effective in this disease and in fact sulphonamides may make the patient worse.<sup>3</sup> The duration of therapy is usually a minimum of two weeks but many individuals would recommend continuing antibiotics for at least one week following complete defervescence. Some favor the use of corticosteroids in patients with central nervous system involvement<sup>6</sup> but there is no documentation of the effectiveness of this therapy by controlled prospective studies. The disseminated intravascular coagulation occurring in this disease may require treatment but this is not invariable.<sup>7</sup> However, thrombocytopenia must be monitored closely and managed appropriately as patients may expire with hemorrhagic complications despite adequate antimicrobial therapy. Because of the presence of myocarditis in some individuals with RMSF the development of congestive heart failure should be managed with appropriate adjustment of fluids and electrolytes, and possibly with digitalis.

- A. Chloramphenicol, 1 gm IV q 4h.
- B. Penicillin G, 20 million units IV qd.
- C. Cephalothin (Keflin®) 2 gm IV q 4 h.
- D. Cefoxitin (Mefoxin®) 2 gm IV q 4 h.
- E. Gentamicin (Garamycin®) 80 mg IM q 8 h.

**Answer: A. Chloramphenicol. None of the other choices listed will be effective in the treatment of Rocky Mountain spotted fever. Penicillin may be effective in treating meningococcal infection but *Rickettsia rickettsii* (The causative agent of RMSF) shows no sensitivity to penicillin. Cephalothin does not produce antimicrobial activity**

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# Calculated Frequency of Metastatic Neoplasms To the Eye and Adnexa

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Metastatic manifestations of malignant neoplasms constitute the most life threatening clinical element of this disease. In general the types of metastases are classified as: (1) Intraluminal cells: histologically visible equivalent of cells detected by antemortem examination of circulating blood; (2) Micrometastases involving vascular wall or contiguous tissue: these are usually not clinically evident; (3) Macrometastases: clinical evident tumor sites removed from location of the primary malignancy. The causes of metastatic disease are generally: (1) transmural invasion of blood or lymph vessels; (2) intravasation by pressure; (3) mechanical manipulation of the primary tumor as for diagnostic or surgical purposes; (4) tissue explosion due to thermal effects of laser or photocoagulation procedures; (5) surgical opening of vessels.

**A**mong intraocular malignancies, metastatic carcinoma has been traditionally given a distant second place incidence behind primary uveal malignant melanoma. There is growing belief, however, that carcinoma metastatic to the eye is not so rare and may be even more common than the primary malignant melanoma.<sup>1-4</sup> This belief is based on the presumption that most patients with systemic carcinoma are not seen by eye physicians and are frequently so ill that they are either unaware of or ignore ocular symptoms. In addition, data suggesting the rarity of carcinoma metastatic to the eye are derived from large ophthalmic pathology laboratories.<sup>5-9</sup>

Font and Ferry<sup>1</sup> suggested that these data are surgically biased. They propose that eyes containing metastatic carcinoma are rarely enucleated except for intractable pain or when the metastatic tumor is misdiagnosed as a primary tumor. On the other hand, enucleation has long been the treatment of choice for primary uveal malignant melanoma and thus a larger number of these would be expected to reach the ophthalmic pathology laboratory. To establish whether enucleation is usually deferred in cases of carcinoma metastatic to the eye, or exenteration usually deferred in cases of carcinoma metastatic to the orbit, we surveyed the 114 ophthalmologists of Kentucky regarding their usual practice in the presence of ocular and adnexal metastatic tumors.

## Methods

A questionnaire was mailed to each of the 114 ophthalmologists of Kentucky through the auspices of the Kentucky Society for the Prevention of Blindness. It consists of five clinical case abstracts—each involving a patient with some form of metastatic neoplasia of the eye or orbit. Case one is a 65-year-old man who had carcinoma of the prostate treated one year previously and who presently has a large, solid, and angle-obscuring, iris mass associated with secondary glaucoma. Case two is a 55-year-old woman who had a mastectomy performed one year previously (without involvement of the regional nodes) but who presently has a non-inflammatory orbital mass biopsied as adenocarcinoma from the breast. Case three is a 55-year-old Negro man who had lobectomy one year previously for a bronchogenic carcinoma and now has a non-inflammatory choroidal mass. Case four is a 55-year-old man who underwent gastrectomy and irradiation for gastric adenocarcinoma one year previously and who now has an irregular, non-inflammatory lid mass measuring 2x3x4 mm which biopsy reveals to be adenocarcinoma. Case five is a two-

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Table. Tabulation Of Responses On 62 Completed Questionnaires

| Case  | Recommendation                  | #  | % of Recommendations Yielding<br>Tumor Tissue for Pathological<br>Examinations |
|---|---------------------------------|----|--|
| 1. 65 year old man who had carcinoma of the prostate treated one year ago, now has a large, solid and angle obscuring iris mass associated with secondary glaucoma.   | a. iridectomy-iridocyclectomy   | 30 | 90   |
|   | b. enucleation                  | 24 |  |
|   | c. avoidance of ocular surgery  | 6  |  |
|   | other*                          | 2  |  |
| 2. 55 year old woman who had a mastectomy performed one year ago but without apparent involvement of the regional nodes, now has a non-inflammatory orbital mass biopsied as adenocarcinoma from the breast.        | a. excision of the mass         | 13 | 34   |
|   | b. exenteration                 | 8  |  |
|   | c. avoidance of orbital surgery | 41 |  |
| 3. 55 year old negro man who had lobectomy one year ago for a bronchogenic carcinoma, now has a non-inflammatory choroidal mass.  | a. local destruction            | 26 | 23   |
|   | b. enucleation                  | 14 |  |
|   | c. avoidance of ocular surgery  | 17 |  |
|   | other*                          | 5  |  |
| 4. 55 year old man who underwent gastrectomy and irradiation for gastric adenocarcinoma one year ago, now has an irregular non-inflammatory lid mass measuring 2x3x4 mm. which biopsy reveals to be adenocarcinoma. | a. extensive resection          | 9  | 85   |
|   | b. local excision               | 44 |  |
|   | c. avoidance of ocular surgery  | 6  |  |
|   | other*                          | 3  |  |
| 5. 2 year old child who underwent abdominal excision of a neuroblastoma 8 months ago, now has painless unilateral exophthalmos confirmed as neuroblastoma on biopsy.  | a. exenteration                 | 9  | 24   |
|   | b. local excision of the mass   | 6  |  |
|   | c. avoidance of surgery         | 43 |  |
|   | other*                          | 4  |  |

\*other—occasionally multiple recommendations for one case would be made.

year-old child who underwent abdominal excision of a neuroblastoma eight months previously and now has painless unilateral exophthalmos confirmed as neuroblastoma on biopsy.

Three of the cases are presented with local biopsy confirmation and two are clinically distinct but without biopsy evidence.

For each case, the responding ophthalmologist is requested to choose among three alternatives for management. Although tailored to meet the requirements of each individual case, the recommendations basically consist of (1) extensive resection; (2) local excision; or (3) avoidance of ocular surgery altogether. In each case, the primary tumor has been treated for cure and the ocular or orbital metastasis is the only evidence of systemic malignant disease. Also, the responding ophthalmologist is instructed to assume that none of the patients has intractable pain and that none finds the lesion so disfiguring as to desire excision for cosmesis alone.

### Results

Sixty-two responses (55%) were suitable for use; three were discarded for inconsistencies of response and one was discarded on the basis of

declined judgment (all such cases would be referred). The Table summarizes responses and gives the percentages of recommendations for each case which would result in tumor tissue being sent to the pathology laboratory (i.e., either extensive resection or local excision).

In a few instances the responder included a brief comment along with his recommendation. For example, one respondent who recommended extensive resection for Case four qualified this with the comment, "Sufficient to get a clear margin." One who recommended local excision in Case four asked, "What is extensive resection?" In the responses to Case five, one physician who recommended exenteration had a question mark in the margin indicating personal uncertainty. In another response to Case five, a question mark was used to mark the recommendation for avoidance of ocular surgery, again indicating uncertainty on the part of the responder.

### Discussion

According to the surgical bias hypothesis of Font and Ferry,<sup>1</sup> tissue from metastatic eye lesions rarely reaches the pathology laboratory and therefore is unrepresented in series purport-



ing to show the incidence of ocular metastatic disease. Our study was initiated to determine how ophthalmologists across one state actually manage various clinical situations involving metastatic disease of the eye or orbit, and in particular the percentages that would yield tumor tissue. Note that Cases two, four, and five involve a biopsy proved metastasis to the eye or orbit. This means that a specimen of the tumor has previously reached the laboratory and subsequent management of the patient may be biased toward the surgical hypothesis of Font and Ferry.

The Table indicates that in Cases one and four a significant number of specimens would be sent for pathological examination. In case one, 56 of the 62 recommendations (90%) were iridectomy-iridocyclectomy or enucleation. In Case four, 53 of the 62 recommendations (85%) were for local excision or extensive resection; however, metastasis to these two locations (i.e., iris and lid) comprise only a small percentage of the total number of ocular-orbital metastases. In a 15-year review of the literature by Albert, Rubenstein and Scheie,<sup>2</sup> 213 cases of metastases to the eye, orbit or adnexa were collated. Iris metastases comprised only 9% and lid metastases only 7% of this total. Bloch and Gartner<sup>3</sup> examined histologically the eyes from 230 patients with autopsy proved carcinoma in various primary sites. They found 28 patients (8%) with ocular metastases and of these 28 only two (7%) involved the iris.

The most common site for ocular metastasis is generally considered to be the choroid.<sup>1,3,10,11</sup> For our case of choroidal metastasis, Case three, only 23% of the responding ophthalmologists recommended a procedure which would result in tumor tissue being sent to the pathology laboratory. Thus, our results indicate that over 75% of choroidal metastases would *not* reach the ophthalmic pathology laboratory. Conversely, this suggests that choroidal metastases are four times more frequent than Kentucky pathology laboratory acquisitions would indicate. Similarly, the results obtained for Cases two and five indicate that orbital metastases are three (Case two) to four (Case five) times more frequent than Kentucky pathology laboratory would suggest.

### Conclusions

Data purporting to show the frequency of ocular-orbital metastatic malignancies are derived largely from ophthalmic pathology laboratories.

Font and Ferry have suggested that these data are surgically biased with ocular-orbital metastases being under-represented. Our findings from sampling the population (55%) of ophthalmic clinicians in Kentucky suggests that metastatic malignancy to the eye actually occurs more frequently than is revealed by specimens reaching pathology laboratories; this is indicated by the number of eye physicians who would not excise such lesions. The surgical practices of these physicians suggest that metastases to the choroid occur about four times more frequently and orbital metastases three to four times more frequently than the number of pathology specimens indicate. Contrawise, the less frequent iris and lid sites of metastases are under-represented only 10%-15% by pathology specimens.

The ophthalmic physician thus has an under appreciated role and a statistically more frequent opportunity to uncover evidence of non-ocular malignancy than is indicated by the proportion of primary and metastatic tumors in laboratory studies. Similar public health opportunities and responsibilities apply to all others who make orbital, ocular, and ophthalmoscopic examinations, including family practitioners, optometrists, and internists.

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# GRAND ROUNDS



University of Kentucky Medical Center

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

## Delayed Perforation Of Small Bowel Following Blunt Abdominal Trauma

A case of small bowel perforation due to blunt abdominal trauma which was not apparent until 35 days following injury is reported. Occult isolated injuries to small bowel may be impossible to detect early and should be considered when a patient who was doing well following blunt trauma suddenly deteriorates.

Small bowel injury, although relatively uncommon, is a well recognized consequence of blunt abdominal trauma.<sup>5,8</sup> Normally the need for surgical intervention can be established by a combination of clinical exam including diagnostic peritoneal lavage, laboratory data and radiographic findings. However, on rare occasions, bowel injury may be accompanied by a paucity of clinical findings such that the diagnosis may be delayed several hours or days.<sup>1,3</sup> This is a report of a case of blunt abdominal trauma resulting in complete division of the distal ileum which did not become apparent until 35 days following injury.

### Case Report

This 32-year-old white male suffered a closed head injury and blunt trauma to the chest and abdomen in a head-on collision of his race car with a stationary object at 40 miles per hour. He was wearing a seat belt and the steering wheel was noted to be broken from the impact. On admission to the emergency room the patient was seen to be alert and oriented. His physical examination was unremarkable except for minor facial lacerations. Specifically, his abdomen was not tender and he had active bowel sounds. On admission his white blood cell count was 15,000 cells/cc and his hematocrit was 41%. Roentgenographic studies of his skull, chest and abdomen were interpreted as normal. Peritoneal lavage was not done. The patient was admitted to the neurosurgical service for observation because he had a brief period of unconsciousness following the accident.

Twenty hours after admission, he was noted to have a temperature of 101°. On re-examination, his abdomen was mildly tender and bowel sounds were absent. Repeat white blood cell count and abdomen films were un-

changed from admission. Because of concern over a possible retroperitoneal injury an intravenous pyelogram was obtained and was normal. An upper gastrointestinal series was followed through to the jejunum and was also normal. His apparent ileus was treated with nasogastric suction and intravenous fluids for 72 hours. He then tolerated a solid diet and passed formed stool. He was discharged home six days following his accident.

Following discharge he was seen in the outpatient clinic on three separate occasions. During two of these visits he complained of lower abdominal cramps associated with chills and fever, but on examination his abdomen was found to be non-tender, he was afebrile and his white blood cell count was not elevated. He was tolerating a solid diet at home, was having formed bowel movements and had returned to work.

Thirty-five days following his motor vehicle accident, the patient returned to the emergency room complaining of severe abdominal pain, nausea, vomiting, fever and chills. This episode of pain had an acute onset approximately three hours before his arrival. He was found to have a markedly tender abdomen and a temperature of 102°. His white blood cell count was 8,600 cells/cc. A chest radiograph was obtained which showed free intraperitoneal air. After a brief period of pre-operative preparation including nasogastric suction, intravenous fluids and antibiotics, he was explored and found to have purulent fluid throughout the peritoneal cavity and an inflammatory mass involving the terminal ileum and cecum. The mass, along with short segments of uninvolved ileum and right colon, was resected and an ileocolostomy was done. His post-operative course was complicated by an anastomotic leak and local abscess formation which required drainage. He made a complete recovery and has returned to full employment.

Examination of the operative specimen revealed total disruption of the terminal ileum at a point approximately 15 cm proximal to the ileocecal valve. There was apparent tissue loss at this point with the two free ends of ileum being 3-4 cm apart and opening into an abscess cavity. There was no evidence of a Meckel's diverticulum or inflammatory bowel disease either by gross or histologic examination.

### Discussion

Small bowel injury due to blunt trauma is most commonly associated with motor vehicle accidents. There is

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some dispute over whether duodenal or jejunal-ileal injuries predominate but any portion of the small bowel may be involved.<sup>2,4</sup> The injury seems to be the result of sudden compression of the abdomen by a seat belt, steering wheel or other fixed object.<sup>2,3</sup> Three mechanisms have been proposed to explain intestinal rupture due to blunt trauma and include (1) burst injury, (2) shear injury and (3) crush injury.

Burst injuries may occur when there is sudden compression of fluid filled bowel which is partially occluded at two points.<sup>4</sup> This is probably the mechanism of duodenal "blowout" injuries in which the pylorus and duodenal-jejunal angle at the ligament of Treitz create a partially closed loop which ruptures when compressed between the abdominal wall and vertebral bodies.<sup>6</sup> This injury, when suspected, may often be diagnosed relatively early by use of water soluble contrast examination of the duodenum.<sup>7</sup>

Shear injuries are seen at points of fixation of the bowel to the body wall. Sudden deceleration may tear small bowel at points such as the ligament of Treitz, the ileocecal junction or at points where the bowel is fixed by adhesions.<sup>9</sup>

Crush injuries to the small bowel are thought to be the most common mechanism for intestinal injury in blunt trauma.<sup>9</sup> In this injury the bowel is crushed between the anterior wall and the vertebral bodies usually at the level of the anterior lordotic curve of the lumbosacral spine.<sup>9</sup> Crush injury to the small bowel can result in contusion with hematoma formation, serosal tears, direct perforation or delayed perforation due to bowel wall or mesenteric injury.

Although our patient is unusual in that he had an extremely long interval between injury and the development of symptoms, he is not unique. Burrell has reported a similar case in which 11 days elapsed between injury and the development of symptoms leading to the diagnosis of jejunal perforation.<sup>1</sup> The difficulty in diagnosis of isolated occult small bowel injuries is pointed up by the fact our patient had repeatedly unremarkable abdominal examinations during the interval from injury to the development of free perforation and peritoneal soilage. Ab-

domen films and a small bowel follow through were also not helpful early in his course. Similar difficulties in diagnosis have been noted by others.<sup>1,3</sup> The mechanism of injury in this case was probably a crush injury to a short segment of small bowel or mesentery so that bowel necrosis with perforation developed over time. The sudden onset of severe symptoms undoubtedly was related to rupture of a previously well contained abscess into the peritoneal cavity.

Unfortunately, there does not seem to be a way to make the diagnosis of isolated occult small bowel injury before peritoneal soilage occurs. What must be emphasized, however, is that intestinal perforation may become apparent hours, days, or as in our patient, weeks after blunt trauma. The possibility of intestinal injury should be considered when a patient who was previously doing well deteriorates following blunt abdominal trauma.

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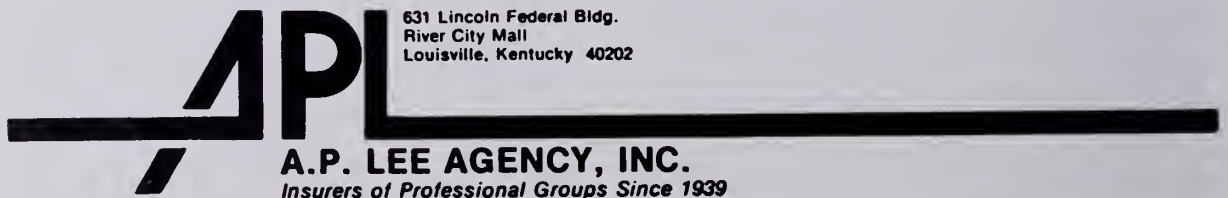


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**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

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# The Maker

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.

*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were**

not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

---

*MYTH: Industry favors only "expensive" brand names and denigrates all generics.*

**FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.**

# Matters.

*MYTH: Generic options almost always exist.*

**FACT:** About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

*MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.*

**FACT:** Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT:** Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT:** Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

## The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

## The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.



Pharmaceutical Manufacturers Association  
1155 Fifteenth Street, N.W.  
Washington, D.C. 20005



## EDITORIAL



### A Hobson's Choice for America

I don't have a nuclear reactor sitting in my backyard, or even anywhere near my city, so I feel safe in my feeling for continued use of atomic energy. Perhaps those who are threatened by the proximity of a nuclear reactor to their homes can feel quite differently.

The recent near-disaster at Three Mile Island has brought up this debate and a whole spectrum of feelings from outrage to enthusiastic support. No one challenges the precept that energy from the atom is cheap, available and efficient. It is all of these things. What gets in the way of its widespread use is the question of safety. Is it now safe? Can it be made more safe? Can it ever be made fail-safe?

Before these questions are answered, one more should be asked. Should America be in the nuclear energy business at all? To this I say a resounding yes. To supply the staggering amount of energy we consume and need, we have few options and no choice but an atomic source. It makes precious little difference whether or not we are being hoodwinked by the oil companies as to the oil reserves still in the ground. We have to pay the price set by them and OPEC or do without.

Alternate sources of energy are currently fraught with problems. Coal, our ace in the hole, has been dealt to us from a cold deck and coal is not quite ready to supply the varied needs as an alternative to a liquid fuel. It may in the future, but not now. Solar energy is promising but still just a promise. Short of a breakthrough it is expensive, inefficient and limited to certain geographical locations.

Here then is America's dilemma. Do we continue to buy foreign oil and send a huge proportion of our national wealth into the Arabians coffers and they in return buy up vast amounts of real estate and business here in our own country? Or do we accept both the challenge and the risks of nuclear power in an effort to remain self-sufficient and independent?

In our past we have never shied away from challenges, risks or hardships. Victory over adversities that test our mettle has become our hallmark. From Valley Forge to the winning of the West, from Château-Thierry to the Great Depression, from Omaha Beach to the moon landing, America has faced risks and won. Nuclear fission offers us much while we wrestle with its dangers. We are equal to the task.

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PHARMACEUTICAL DIVISION



# COMPATIBILITY



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## Vasodilan—compatible with coexisting diseases (e.g., glaucoma, diabetes)

Vasodilan has not been reported to affect the course of coexisting disease; it has not been reported to affect blood sugar levels or to raise intraocular pressure.

## Vasodilan—compatible with concomitant therapy

Vasodilan has not been reported to affect the treatment of coexisting disease; it is compatible with such drugs as hypoglycemics and miotics.

## Vasodilan—compatible with your total regimen for vascular insufficiency

Vasodilan can be a valuable adjunct in planning a total therapeutic program for vascular insufficiency.

**\*Indications:** Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, the FDA has classified the indications as follows:

Possibly Effective:

1. For the relief of symptoms associated with cerebral vascular insufficiency.
2. In peripheral vascular disease of arteriosclerosis obliterans, thromboangiitis obliterans (Buerger's Disease) and Raynaud's disease.

Final classification of the less-than-effective indications requires further investigation.

**Composition:** Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

**Dosage and Administration:** Oral: 10 to 20 mg., three or four times daily.

Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

**Contraindications and Cautions:** There are no known contraindications to oral use when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

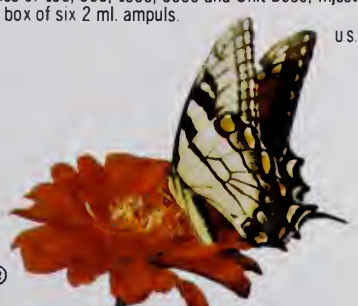
**Adverse Reactions:** On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses. For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

**Supplied:** Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

U.S. Pat. No. 3,056,836



**VASODILAN<sup>®</sup> 20-mg tablets**  
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**20 mg q.i.d. recommended dosage**

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PHARMACEUTICAL DIVISION

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**Warnings:** Do not administer more frequently than every 6 hours, or within 12 hours after rectal dose of any preparation containing theophylline or aminophylline. Do not give other compounds containing xanthine derivatives concurrently.

**Precautions:** Use with caution in patients with cardiac disease, hepatic or renal impairment. Concurrent administration with certain antibiotics, i.e., clindamycin, erythromycin, troleandomycin, may result in higher serum levels of theophylline. Plasma prothrombin and factor V may increase, but any clinical effect is likely to be small. Metabolites of guaifenesin may contribute to increased urinary 5-hydroxyindoleacetic acid readings, when determined with nitroazanaphthal reagent. Safe use in pregnancy has not been established. Use in case of pregnancy only when clearly needed.

**Adverse Reactions:** Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

**How Supplied:** Capsules in bottles of 100 and 1000 and unit-dose packs of 100; Liquid in bottles of 1 pint and 1 gallon.

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# A Link in the Chain

*Mrs. Gordon Betts, Somerset, was installed as President of the Auxiliary to KMA at its Annual Convention, April 24-25. She will write the "A Link in the Chain" page for The Journal during the 1979-80 Auxiliary year.*



Mrs. Betts

## Theme For The Year: We Care

I have asked Auxilians to think with me through the coming year about caring. Let me share with you a brief story told by Bjorn Secher, a well-known author and lecturer. He told of two people discussing world issues who pinpointed apathy as one of the major problems facing society today. One person ruined it all by saying, "Yes, apathy is one of the biggest problems in the world today, but then, oh well, who cares?"

The answer: We care. Auxilians care. Because we care, we joined the Auxiliary to assist in the advancement of medicine. Those welcoming calls on new physician's families are made because we care; and for the same reason, we offer our services in numerous health projects.

You might ask what the problem is if we already care? Anyone who has followed the headaches and heartaches that have beset organized medicine in recent years knows well there are problems. The answers, as well as the reasons, are as complex and many faceted as the nation's economy.

But we have to start somewhere. Where better than with ourselves, with each individual. Let's work this year to generate a more positive attitude in our organization and in the community. Let's develop an attitude of caring even more than before. Who should be interested at this crucial time for medicine if not doctors' spouses?

A great part of caring involves communicating. Mr. Secher made the meaning of that word clear when he said, "Information is giving something out. Communication is getting something through." Whenever two or more people are together, somebody sells or communicates something. You do this by your attitude even more than by the words you say.

As doctors' spouses we often represent the medical profession to those we come in contact with. Let's use these selling opportunities to improve the medical profession's image. We are the ones who listen to the complaints and often must defend medicine. Get the facts on costs, for example, and be prepared with correct answers.

We can do much to change the lingering public image of the doctor's wife from one whose main interest is the next party or a new car, to one who is a worker with the know-how to get things done for the betterment of the community. Be sure to identify yourself as a medical auxiliary volunteer. This is not only good public relations for the Auxiliary, but it helps establish the physician's spouse as a person who cares.

We should look closely too at the image we have created with our own spouses. Does the local medical society know Auxiliary activities aren't all fun and games? There is hard work involved as we show we care. Sometimes they might not be really sure of what we do or its value. Do they know, for example, how much your county raised for AMA-ERF last year? Or that the Auxiliary helped paint immunization awareness hopscotch games on local school playgrounds? Approach your medical society for cooperation in health projects. Let them know what you are doing, and seek financial backing when needed. We exist because of them, and want them to know we accept the responsibilities that go along with the many benefits we have all enjoyed.

No matter how you choose, there is a way to show you care and a place for every interest in the medical Auxiliary. It may be through one of its established fund-raising programs like AMA-ERF or health scholarships. It may be through the Auxiliary's efforts in the area of health legislation. Or you may choose to direct your caring into one of many health or safety related projects that the Auxiliary undertakes, like hospice, child abuse prevention and programs for the aging, and drug awareness. The list is long. Through ingenuity and caring, it will be increased this year.

We are not trained medical experts, just volunteers. But with our enthusiasm, a positive approach, and a general concern we can show we care about our community, its people, and the advancement of its health care. We may not be able to change the world in a day, but like a song you may have learned as a child, each one of us can "brighten the corner where you are." Auxiliary, put something of yourself into it. Care with me this year, care even more.

MRS. GORDON BETTS,  
AKMA President



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- Pre-set conferencing that will ring pre-selected combinations of phones simultaneously (a feature that could make lots of office memos obsolete).

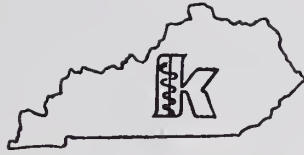
Two more important considerations in any business phone decision: service and maintenance. At Bell, we take total responsibility.

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## ASSOCIATIONAL NEWS



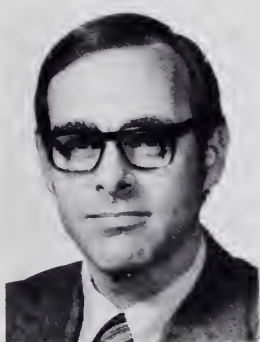
### 1979 KMA Annual Meeting, September 24-27, Will Feature Outstanding Scientific Program, Speakers

A variety of topics will be discussed by medical authorities from across the nation in this year's KMA Annual Meeting at the Ramada Inn/Bluegrass Convention Center in Louisville, September 24-27.

The scientific program planned for this year will feature guest speakers representing 20 medical specialties. The four themes for the program are, "Trauma", "The World of Cancer", "The Biliary Tree", and, "Recent Advances in Medical Practice."



Doctor Stauffer



Doctor Thistle

Tuesday morning, September 25, Shannon E. Stauffer, M.D., will speak on "The Seat Belt Triad." Doctor Stauffer is Chairman of the Division of Orthopaedics and Rehabilitation at Southern Illinois University School of Medicine, Springfield, Ill. He is a member of the American Academy of Orthopaedic Surgeons and is Secretary of the Committee on Rehabilitation. Doctor Stauffer is the author of six textbooks and numerous scientific articles.

Scheduled to speak Wednesday afternoon, September 26, is Johnson L. Thistle, M.D., consultant in Internal Medicine and Gastroenterology at the Mayo Clinic, Rochester, Minnesota. Doctor Thistle's subject for the meeting is "Dissolution of Gallstones." A Fellow of the American College of Physicians, Doctor Thistle has been an Instructor in Medicine and Associate Professor of Medicine at the Mayo Medical School. His research interests include gallstones and hepatobiliary disease.

Also scheduled Wednesday afternoon is David Zimmon, M.D., a 1958 graduate of Harvard Medical School. Doctor Zimmon is a professor of Clinical Medicine at the New York University School of Medicine. He is a member of the New York County Medical Society, The Medical Research Society, London, England and The Boylston Medical Society of Harvard Medical School.

Doctor Zimmon's topic for the annual meeting is "Endoscopic Diagnosis and Management of Biliary Tract Disease."

Thursday morning, September 27, John E. Wolf, Jr., M.D., will speak on "Progress in Dermatology." Doctor Wolf is an Assistant Professor in the Department of Dermatology at Baylor College of Medicine, and Clinical Instructor in the Department of Dermatology at the University of Texas Medical School. He is a member of the American Academy of Dermatology, and is the Scientific Program Chairman for the Dermatological Therapy Association.



Doctor Zimmon



Doctor Wolf

Other activities during the KMA Annual Meeting include 21 specialty group meetings, KMA House of Delegates meetings on September 24 and 26, and the President's Luncheon on September 26.

More information on the program and activities of the 1979 KMA Annual Meeting will be carried in upcoming issues of The Journal and "Communicator."

### COST CUT CORNER

**JUNE—Medical Staff Organizations Should Encourage Cost Savings.**

Physicians, through the medical staff organization, should suggest cost containment efforts which medical personnel and hospital administration can implement. For example: charges can be printed on order forms for lab tests and x-rays; consider including an "economic case" in your morbidity and mortality conference; give new interns and residents at your hospital a "cost containment orientation" and provide them with manuals detailing patient charges.



## Digest of Proceedings, Board of Trustees, April 4-5, 1979

The third meeting of the Board of Trustees during the Associational year was held on April 4-5, 1979, at the KMA Headquarters Office in Louisville.



Members of the Board of Trustees at KMA Headquarters, April 5.

President Cooper reported on activities and meetings he had attended representing the Association. Of major importance was the commitment being made by KMA, the Kentucky Hospital Association, and Blue Cross and Blue Shield of Kentucky to the Kentucky Voluntary Effort. Avil L. McKinney, executive vice president of Kentucky Blue Cross and Blue Shield, related the activities of his organization regarding the Medical Necessity Project, whereby Blue Cross and Blue Shield was trying to phase out certain routine medical and laboratory procedures which over time had proven to be most often unnecessary or inefficient. This effort is part of a national program with significant input from affected medical specialty groups.



Carl Cooper, Jr., M.D., president, speaks to the Trustees on efforts to support the Kentucky Voluntary Effort.



Harvey Page, M.D., left, (14th district) and Walter Coe, M.D., (5th district) listen to discussion on the Medical Necessity Project.

AMA President-Elect, Hoyt D. Gardner, M.D., reported an increase in AMA membership over last year. In other activities, Doctor Gardner summarized the many areas of legal involvement in which the AMA was presently involved. He indicated AMA's commitment to full protection of the membership through the legal process.

Stanley Hammons, M.D., Chief Medical Officer of the Department for Human Resources, was in attendance and reported on several state government programs in progress in the areas of health planning, health manpower, data collection, and others.

On committee matters, the Board noted establishment of a Rules Committee, approved guidelines adopted by an ad hoc committee on the definition of a physician's office for purposes of Certificate of Need, approved the establishment of a "KMA Educational Achievement Award" for an individual making an outstanding contribution to medical education, and heard reports on Legislative activities from both the state and national committees.



Doctors Bushey, Oliver and Blackburn, left to right, at the executive board meeting in March.



William Watkins, M.D., chairman, Board of Trustees, speaks to the executive board members.

Nominations were approved for submission to the Governor's Office for the Advisory Committee, Board of Nursing Education and Nurse Registration; Certificate of Need and Licensure Board; Board of Medical Licensure; and the Kentucky Drug Formulary Council.

Ballard W. Cassady, M.D., President of the Kentucky Medical Insurance Company, advised the Board that capitalization should soon be realized and that funds totaling over one million dollars had been collected from stock purchase. However, it is extremely important that all members continue to be encouraged to purchase stock as well as liability coverage from the Kentucky Medical Insurance Company.

Prior to adjournment, the Chairman announced that the next meeting of the KMA Board of Trustees would be held August 8-9, 1979.



## Trustees' Report

### TENTH TRUSTEE DISTRICT

**Richard F. Hench, M.D., Lexington**

The Tenth Trustee District is made up of Woodford, Jessamine, and Fayette Counties. On Tuesday, May 8, 1979, the Tenth Trustee District meeting was held at St. Joseph Hospital in Lexington. A very interesting talk was given by Prof. Kat Unrug, a mining engineer from University of Kentucky, on "Coal, Energy and the Future." It was a very timely and interesting discussion of one of the fundamental issues of our time.



It was a pleasure to see our fellow physicians from the Tenth District. I have been especially impressed by our neighbor, Woodford Memorial Hospital. This 71 bed hospital in Versailles is fully accredited with a staff of 17 physicians covering 11 specialties and subspecialties.

This busy institution handled 2131 admissions and 170 deliveries last year. An additional 6300 visits were made to the outpatient/emergency room. There is a well equipped four bed, intensive coronary care unit.

I recently had the pleasure of attending a staff meeting at Woodford Memorial Hospital and later visiting with the administrator, Don S. Tuttle. Under his direction an ambitious expansion plan is under way. Phase one of this plan involves building a Family Health Care Center at the hospital to include doctor's offices and an outpatient facility.

The Fayette County Medical Society and the Central Kentucky Blood Center have moved into their new home at 330 Waller Avenue. The building which was previously occupied by the Fayette County Health Department was dedicated on May 16, 1979. Governor Julian Carroll was the featured speaker.

This building and the CKBC are indeed milestones in the history of medicine in Fayette County. So many people did so much to bring this about that I hesitate to mention names. However, I will risk a special mention of Don Webb, Tom Watts, Dr. Irene Roedel, Dr. James Holloway, and Dr. Raphael Caffrey. These people contributed greatly to this venture along with many others in the medical and lay community.

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### UNIVERSITY OF KENTUCKY

#### Department of Pathology

Pathologist needed to work primarily in surgical pathology and cytology at the University and the Veterans Administration Medical Centers. Appointment will carry the academic rank of Instructor with extensive responsibilities in medical student education. Send c.v. to Abner Golden, MD., Chairman, Dept. of Pathology, MS 305 Medical Center, University of Kentucky, Lexington, Ky. 40536.



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**INDICATIONS:** *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, cosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the

ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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penicillin V potassium

**Description:** V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

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**Contraindication:** Previous hypersensitivity to penicillin.

**Warnings:** Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies

before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

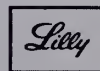
**Precautions:** Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiospasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

**Adverse Reactions:** Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin.

[102175]

**\*Equivalent to penicillin V.**

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- 1 13th District Trustee Meeting, Ashland
- 2-4 Para Medic Advisory Committee, Louisville
- 6 AAMSE Board, Louisville
- 8 10th District Trustee Meeting, Lexington  
*Journal* Editors, Louisville
- 9 Kentucky Chapter AAMA, Louisville
- 10 Maternal and Child Care Meeting, Louisville  
Medicaid Projections Committee, Frankfort
- 15 CME Site Visit, Louisville  
Good Samaritan Site, Lexington
- 17 RKMSF Annual Meeting, Louisville
- 24 CME Committee Meeting, Louisville  
Medicaid Projections Committee, Frankfort
- 29 State Primary

### JUNE

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- 7 LCCME Meeting, Chicago
- 13 McDowell Fund Raising Committee, Danville

### JULY

- 22-26 AMA Annual Meeting, Chicago
- 23 AAMSE Editors' Meeting, Chicago

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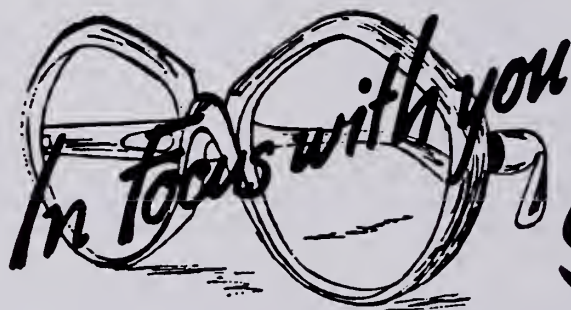
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The effectiveness of Valium (diazepam) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindications:** Tablets in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**ORAL:** Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

**INJECTABLE:** To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V.: inject slowly, taking at least one minute for each 5 mg (1 ml) given, do not use small veins, i.e., dorsum of hand or wrist; use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest, concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea, have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status.

Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

**Precautions:** If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), i.e., phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

**INJECTABLE:** Although promptly controlled, seizures may return; readminister if necessary, not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures, use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

**Adverse Reactions:** Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported, should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

**INJECTABLE:** Venous thrombosis/phlebitis at injection site, hypotactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

**Management of Overdosage:** Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure; employ general supportive measures, I.V. fluids, adequate airway. Use levarterenol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects. Dialysis is of limited value.

**Supplied:** Tablets, 2 mg, 5 mg and 10 mg, bottles of 100 and 500; Tel-E-Dose® (unit dose) packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Packs of 50, available singly and in trays of 10. Ampuls, 2 ml, boxes of 10, Vials, 10 ml, boxes of 1, Tel-E-Ject® (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.



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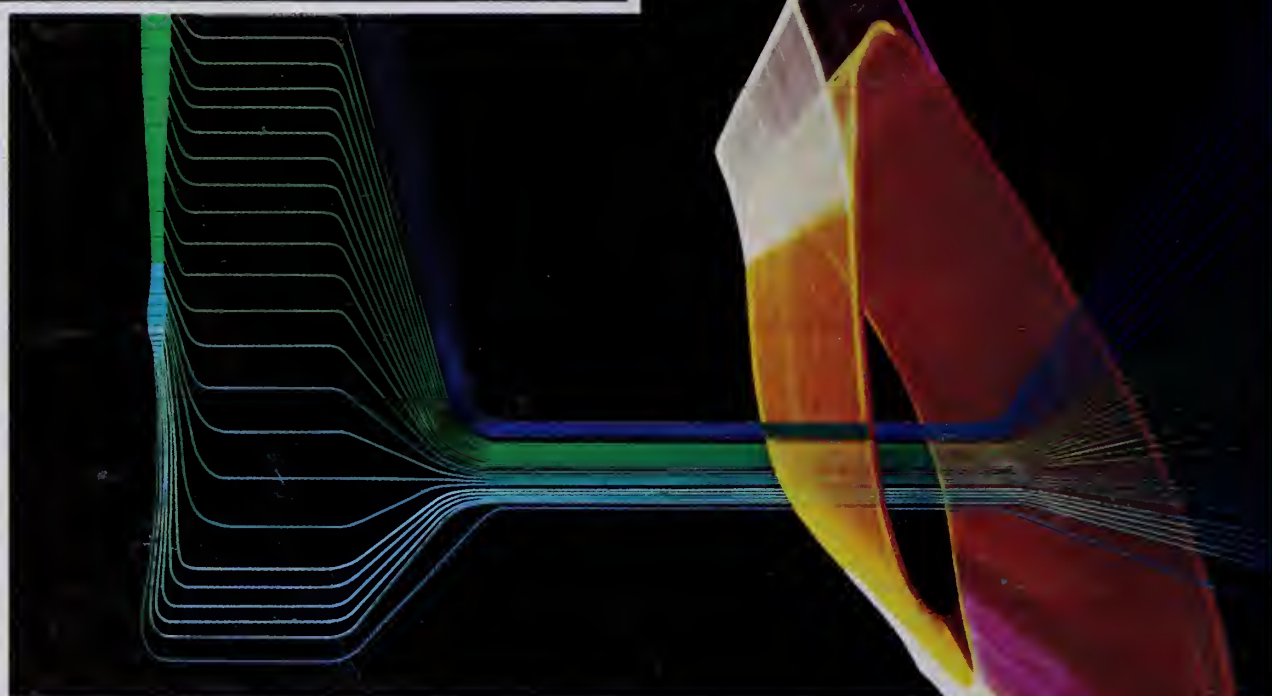


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ROCHE

July 1979  
Volume 77  
Number 7

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Part 7, Treatment of Atrophic  
Vaginitis in Postmenopausal Women,  
The Bone Marrow As An Organ:  
The Morphokinetic Approach to Anemia

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# A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

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Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

**Valium<sup>®</sup> IV**  
**diazepam/Roche**  
2-mg, 5-mg, 10-mg scored tablets  
a prudent choice in psychic  
tension and anxiety

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

**Dosage:** Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

**Supplied:** Valium<sup>®</sup> (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose<sup>®</sup> packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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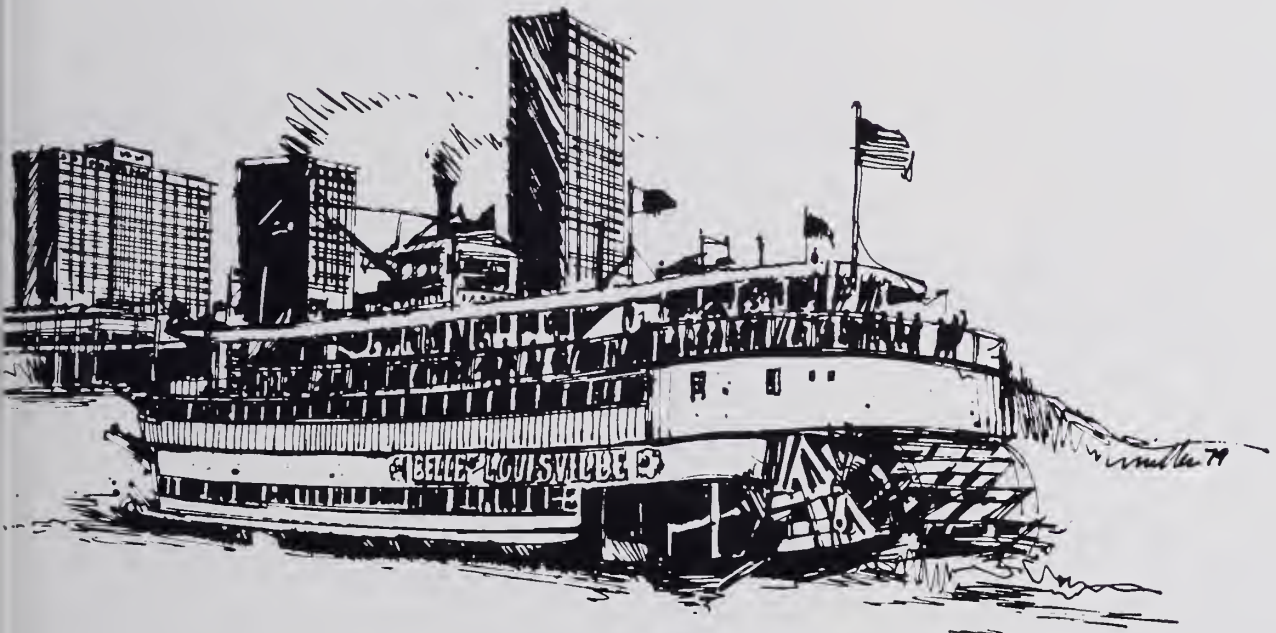
### JULY BUYERS GUIDE FOR JOURNAL OF KMA

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# KMA Annual Meeting

Ramada Inn/Bluegrass Convention Center, Louisville

September 24-27, 1979



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Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma, agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence.* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSEAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

## Merrell

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**Overweight may not always be simple...  
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Complicated or not...**

# **Tenuate® Dospan®<sup>IV</sup>** **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

## **A useful short-term adjunct in an indicated weight loss program.**

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

## **in uncomplicated overweight.**

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

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The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.<sup>1</sup> And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."<sup>2</sup> Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.  
And it's responsible medicine.**

Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

# **Merrell**



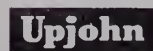
For prescribing information see opposite page



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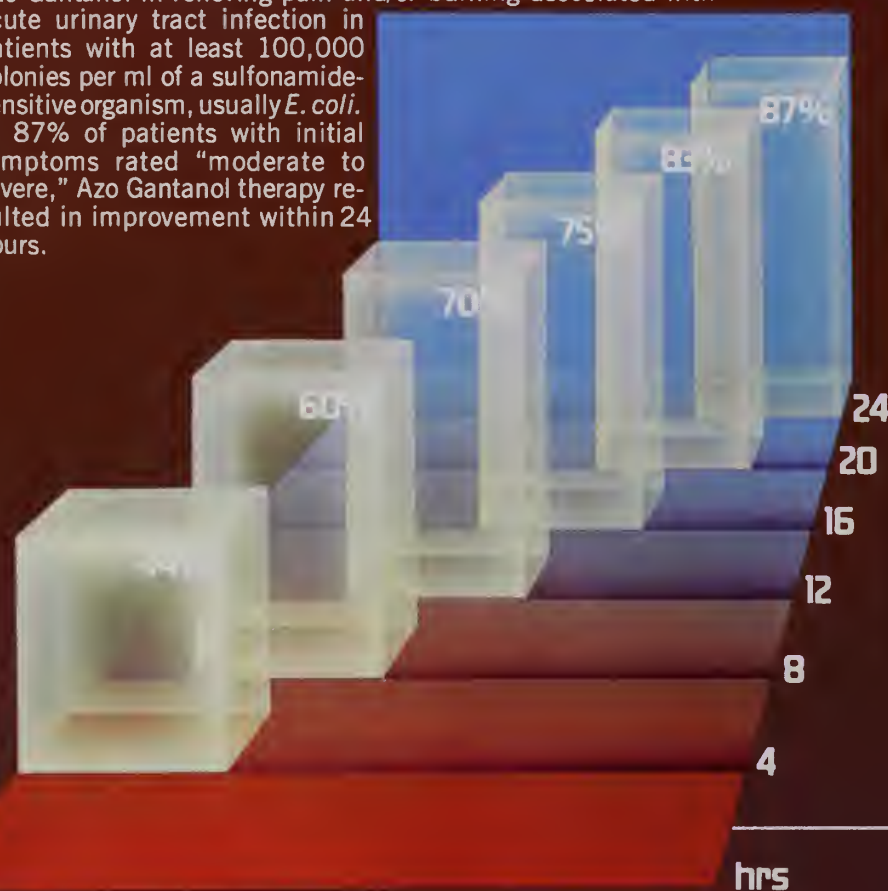
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## Important data on the pain of acute cystitis:

# In 87% of patients studied (303 of 349), Azo Gantanol® reduced pain and/or burning within 24 hours\*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

# Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for  
the pain

for  
the pathogens

\*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows. **Indications:** In adults, urinary tract infection complicated by pain (primarily pyelonephritis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. Not fully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Administer aminobenzoic acid to follow-up culture and increasing frequency of resistant organisms. The usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels. Variations may occur; 20 mg/100 ml should be maximum total level.

**Contraindications:** Children below age 12; sulfonamide hypersensitivity; pregnancy at term during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hematuria, and pyelonephritis of pregnancy or disturbances.

**Warnings:** Safety during pregnancy not established. Deaths from hypersensitivity reactions, aplasia, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (throat, fever, pallor, purpura or jaundice) indicate serious blood disorders. Frequent urinalysis with microscopic examination is recommended during sulfonamide therapy.

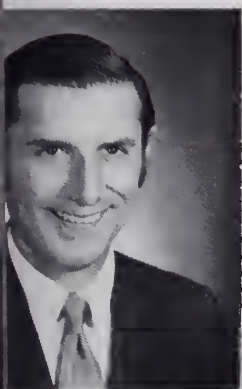
**Precautions:** Use cautiously in patients with impaired renal or hepatic function, severe bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, thrombinemia and methemoglobinemia); *skin reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, peripheral edema, conjunctival and scleral injection); *sensitization, arthralgia and allergic myalgia*; *G.I. reactions* (nausea, emesis, abdominal pain, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis); *CNS reactions* (headache, neuritis, mental depression, convulsions, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, nephrosis with oliguria and anuria, pericarditis, nodosa and L. E. phenomenon). Due to chemical similarities with some goitrogenic agents (acetazolamide, thiazides) and other glycosidic agents, sulfonamides have caused instances of goiter production, diuresis, hypoglycemia. Cross-sensitivity with these agents may exist.

**Dosage:** Azo Gantanol is intended for the painful phase of urinary tract infections. **Adult dosage:** 2 Gm (4 tabs) initially, then (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be considered. After relief of pain has been obtained, treatment with Gantanol (sulfamethoxazole) may be considered.

**NOTE:** Patients should be told that the dye (phenazopyridine HCl) will color the urine. **Supplied:** Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

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# MESSAGE FROM THE PRESIDENT

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## The AMA

**P**resident Carl Cooper has asked me, as the senior delegate for Kentucky, to write the President's Page for this month. All of Kentucky can be proud of one of us. Hoyt D. Gardner, MD., Louisville, will be inaugurated as the new President of the American Medical Association on July 25 when the House of Delegates meets at the Marriott Hotel in Chicago.

The House of Delegates of the AMA meets twice a year, usually in June and December for five days each time. All members are invited to the sessions. The KMA delegation is delighted to receive your comments and suggestions so, "keep those cards and letters coming."

You are now represented by delegates David B. Stevens, Lexington; Fred C. Rainey, Elizabethtown; and Harold D. Haller, Louisville. Alternate delegates are Lee C. Hess, Florence; Kenneth P. Crawford, Louisville; and Wally O. Montgomery, Paducah. Robert Cox, William Applegate and other KMA staff, in addition to the President, President-elect and Chairman of the Board of Trustees, complete the KMA delegation.

AMA policy is determined by the House meeting in general session under standard parliamentary procedure. Ordinarily about 150 items are on the agenda. Almost any activity that affects physicians can be on the docket. Categories include: (1) standards such as requirements for improved residencies, items for the joint commission on accreditation of hospitals, guidelines for primary and secondary care; (2) physician conduct as might be determined by the modifications and the ongoing development of principles of *Medical Ethics*; (3) public policy issues regarding national legislation (national health insurance), medicare and medicaid problems, quackery and liability insurance; (4) internal affairs include AMA organization, dues and AMA financial status (good now but bad soon unless more physicians join), and elections. The House elects the various standing committees or councils, the 12 member board of trustees and general officers. The Board is responsible for directing AMA within the policy constraints determined by the House of Delegates.

There will be 274 delegates, 212 selected by their various state associations and 62 chosen directly by national medical societies. 65 per cent have served five years or less.

Your AMA is a vital, dynamic and responsive expression of collective points of view. The structure of the organization is such that we can all agree to disagree at times. But our sharing concerns and goals are too important to allow divisiveness to divide us.

DAVID B. STEVENS  
Senior Delegate to the AMA

*This is the fourth in a series of articles written at the request of Carl Cooper, Jr., M.D., KMA President*





Doctor White

## "Trauma" is Theme of First Scientific Session at KMA Annual Meeting

Roger D. White, M.D. will speak Tuesday morning, September 25, on "Mobile Basic and Advanced Life Support in Traumatic Emergencies."

Doctor White, assistant professor, Department of Anesthesiology at Mayo Medical School, will give a presentation on the knowledge and skills applied by emergency medical technicians-ambulance (EMT-A) and the emergency medical technician-paramedic (EMT-P) in treating victims of trauma at the scene of the crisis and during transport.

Specific techniques to be discussed are the use of the esophageal obturator airway, intravenous line placement, volume expansion and the use of the anti-shock garment. The pre-hospital application of those techniques by properly trained EMTs will also be discussed.

Complete information on the program and activities of the 1979 KMA Annual Meeting will be carried in the August issue of *The Journal*.

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disturbed... strikes when agitated



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Tridihexethyl Chloride 25 mg—Meprobamate 200/400 mg

No phenothiazine. No barbiturate. No belladonna.  
Providing the highly effective, time proven antispas-  
modic activity of PATHILON® Tridihexethyl Chloride to  
relax the bowel, stop the pain...and the classic calming  
action of meprobamate to relieve anxiety.

\*The FDA has evaluated PATHIBAMATE as possibly effective as adjunctive therapy for this indication.

See BRIEF SUMMARY on following page.

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# PATHIBAMATE®

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Tridihexethyl Chloride 25 mg.—Meprobamate 200/400 mg.

- **PATHILON®** Tridihexethyl Chloride stops spasm, relieves pain
- **Meprobamate** calms the patient

**INDICATIONS:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows: Possibly Effective: as adjunctive therapy in peptic ulcer and in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, and functional gastrointestinal disorders), especially when accompanied by anxiety or tension. It should be used as an adjunct to other appropriate measures such as proper diet and antacids.

**Contraindications:** TRIDIHETHYL CHLORIDE: Allergic or idiosyncratic reactions to this or related compounds; glaucoma; obstructive uropathy (e.g., bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the G.I. tract (as in achalasia, paralytic ileus, pyloroduodenal stenosis, etc.); intestinal atony of the elderly or debilitated; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. MEPROBAMATE: Acute intermittent porphyria; allergic or idiosyncratic reactions to it or related compounds (carisoprodol, mebutamate, tybamate or carbromal).

**Warnings:** TRIDIHETHYL CHLORIDE: In high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Do not treat diarrhea associated with ileostomy or colostomy with this drug. If drowsiness or blurred vision occurs, warn the patient not to engage in activities requiring mental alertness (operating motor vehicles or machinery) or to perform hazardous work. MEPROBAMATE: *Drug dependence:* Physical and psychological dependence and abuse have occurred. Carefully supervise dose and amounts. Avoid prolonged use to alcoholics and those with known propensity for taking excessive quantities of drugs. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis, and rare convulsive seizures more apt to occur in those with CNS damage or pre-existent or latent convulsive disorders). Withdrawal symptoms usually begin within 12-48 hours after drug stoppage and cease within the next 12 to 48 hours. Reduce excessive and prolonged dosage gradually over one or two weeks rather than stopping abruptly, or substitute a short-acting barbiturate, then gradually withdraw. *Potentially hazardous tasks:* (see above) *Additive Effects:* Meprobamate and alcohol, other CNS depressants, or psychotropic drugs may be additive; take appropriate precautions. *Pregnancy and Lactation:* Several studies indicate increased risk of congenital malformations with use of minor tranquilizers (meprobamate, chlordiazepoxide, diazepam) during the first trimester of pregnancy. Avoid use of these drugs during this period. Consider possibility of pregnancy in a woman of childbearing potential at time of drug institution. If patient becomes pregnant during therapy with this drug, consult physician about desirability of discontinuing use of the drug. Meprobamate passes the placental barrier, is present in umbilical cord blood and breast milk of lactating mothers at concentrations two to four times that of maternal plasma; take in account in breast-feeding patients.

**Precautions:** TRIDIHETHYL CHLORIDE: Use with caution in autonomic neuropathy, hepatic or renal disease, early evidence of ileus, e.g., peritonitis, ulcerative colitis (large doses may suppress intestinal motility, thus producing a paralytic ileus; may precipitate or aggravate toxic megacolon), hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, hypertension, non-obstructing prostatic hypertrophy, hiatal hernia associated with reflux esophagitis. In the treatment of gastric ulcer may produce a delay in gastric emptying time (antral stasis). Do not rely on drug in complication of biliary tract disease. May increase heart rate in tachycardia. With overdosage, a curare-like action may occur. *Meprobamate:* To preclude oversedation, give the lowest effective dose to elderly and/or debilitated patients. Consider suicidal attempts and dispense the least amount of drug feasible at any one time. Use with caution in patients with compromised liver or kidney function to avoid excess accumulation. May precipitate seizures in epileptics.

**Adverse Reactions:** (Can occur with either component) TRIDIHETHYL CHLORIDE: (Physiologic or toxic, depending on patient response) xerostomia; urinary hesitancy and retention; tachycardia; palpitations; blurred vision; mydriasis; cycloplegia; increased ocular tension; loss of taste, headaches; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; decreased sweating; some degree of mental confusion and/or excitement especially in the elderly. MEPROBAMATE: *CNS:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impaired visual accommodation; euphoria, overstimulation; paradoxical excitement, fast EEG activity. *G.I.:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations; tachycardia, arrhythmias, transient ECG changes, syncope, hypotensive crises (one fatal case). *Allergic or Idiosyncratic:* (Usually seen during the first to fourth dose in those having no previous contact with the drug). Mild reactions are itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others include leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe (rare) include hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome, bullous dermatitis (one fatal case when given in combination with prednisolone). In case of such reactions, discontinue drug and initiate appropriate therapy (epinephrine, antihistamines, and, in severe cases, corticosteroids). Consider allergy to excipients (furnished to physicians on request). *Hematologic:* (See also Allergic or Idiosyncratic) Agranulocytosis, aplastic anemia (rarely fatal). Thrombocytopenic purpura (rare). *Other:* Exacerbation of porphyric symptoms.

All Contraindications, Warnings, Precautions, and Adverse Reactions in regard to Tridihexethyl chloride refer also to PATHILON® Tridihexethyl Chloride Lederle.

\*The FDA has evaluated PATHIBAMATE as possibly effective as adjunctive therapy in irritable bowel syndrome.

## POSTGRADUATE OPPORTUNITIES

### IN KENTUCKY

#### JUNE

- 6-7 9th Annual Emergency Care Seminar, 4th Annual Emergency Medical Services Seminar (KMA), Ramada Inn, Hurstbourne Lane
- 10-15 4th Family Medicine Review,\* Galt House
- 19 The Biochemical Basis of Psychiatric Illness and Therapy, Highlands Baptist Hospital

#### JULY

- 18-19 KAFP Scientific Meeting, Owensboro
- 25 Physician Responsibilities in High School Athletics, Health Sciences Center

#### SEPTEMBER

- 24-27 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville
- 27-29 Gynecologic Surgery, Hyatt Regency, Louisville

#### OCTOBER

- 17-18 Hypertension 1979\*\*
- 20 Kentucky Regional Meeting, American College of Physicians, Hyatt House, Louisville

#### NOVEMBER

- 11-16 1st Annual Family Medicine Update, Hyatt House, Louisville. For information call (502) 588-6185

#### DECEMBER

- 7-8 Renal Failure\*\*

\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

\*\*For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202



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## Treatment of Atrophic Vaginitis in Postmenopausal Women with Micronized Estradiol Cream— A Follow-up Study

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Forty-three patients, who had been relieved of atrophic vaginitis with daily administration of 0.2 mg  $17\beta$ -estradiol as a vaginal cream, were followed for two additional four-week periods in three groups: discontinuance of treatment, continuance on placebo cream and continuance on daily dosage of 0.1 mg estradiol in vaginal cream. The groups without treatment and with placebo cream relapsed, while the group with daily estradiol vaginal cream treatment had a sustained remission from atrophic vaginitis.

Previously<sup>1</sup> we reported the safety and efficacy of micronized estradiol cream for treating atrophic vaginitis resulting from estrogen deficiency in postmenopausal women. A daily dosage of 0.2 mg estradiol for one to two months is an adequate therapy for relief of vaginal and vasomotor symptoms. To assess the potential relapse as well as a possible maintenance therapy at a reduced dosage, we undertook a follow-up study. The results are reported here.

### Materials and Methods

Micronized 17  $\beta$ -estradiol in a nonliquefying cream base (Estrace® Vaginal Cream) was supplied by Mead Johnson & Company, Evansville, Indiana. Each gram of the cream contained 0.1 mg of micronized estradiol. The placebo cream was the same cream base as above. The patients were instructed to instill 1g of these creams once daily deeply in the vaginal vault at bedtime.

At completion of the two months of estradiol vaginal cream therapy<sup>1</sup>, 42 of the 51 patients consented to participate in the follow-up study, plus one additional patient who had completed one month of therapy. The patients were assigned randomly into three groups: 13 patients to the group without treatment, 14 patients to the placebo cream group and 16 patients to the group who received a daily dosage of 1 mg micronized estradiol vaginal cream. Placebo and active cream were assigned to patients by double-blind method. The patients were interviewed on days 1, 29 and 57 for the severity of vaginal symptoms; i.e., dryness, itching and dyspareunia. By inspection, the severity of the atrophic vaginitis was evaluated by the degree of pallor, tenderness, friability and elasticity of vaginal mucosa. The severity was graded on a scale: 0 = no symptom or normal, 1 = mild, 2 = moderate and 3 = severe. A maturation index was determined at each visit.

The maturation index data on days 1 and 29 were subjected to a profile analysis. The analysis included comparisons of changes from day 1 to

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**Table**  
**Comparison of Vaginal Symptoms Amount Groups Without Treatment, with Placebo Cream and with**  
**Estradiol Vaginal Cream Treatment**

Mean  $\pm$  S. E.

|                      | No<br>Treatment  |                  |                 | Placebo         |                  |                  | Estradiol<br>Cream |                  |                  |
|----------------------|------------------|------------------|-----------------|-----------------|------------------|------------------|--------------------|------------------|------------------|
|                      | Day 1<br>n = 13* | Day 29<br>n = 13 | Day 57<br>n = 9 | Day 1<br>n = 14 | Day 29<br>n = 14 | Day 57<br>n = 13 | Day 1<br>n = 16    | Day 29<br>n = 16 | Day 57<br>n = 15 |
| Maturation Index     | 0.77             | 28.85            | 51.78           | 4.36            | 16.43            | 30.77            | 0.00***            | 0.50             | 5.13             |
| Parabasal (MIP%)     | $\pm 0.77$       | $\pm 5.88$       | $\pm 5.94$      | $\pm 3.26$      | $\pm 4.51$       | $\pm 5.66$       | $\pm 0.00$         | $\pm 0.44$       | $\pm 3.64$       |
| Maturation Index     | 72.77            | 18.85            | 4.44            | 69.29           | 37.86            | 20.38            | 75.06              | 70.19            | 65.73            |
| Superficial (MIS%)   | $\pm 2.76$       | $\pm 3.61$       | $\pm 1.09$      | $\pm 4.58$      | $\pm 6.07$       | $\pm 5.00$       | $\pm 1.25$         | $\pm 3.36$       | $\pm 5.73$       |
| Atrophic Vaginitis** | 0.23             | 2.15             | 2.89            | 0.21            | 1.50             | 2.23             | 0.00***            | 0.31             | 0.47             |
|                      | $\pm 0.17$       | $\pm 0.10$       | $\pm 0.11$      | $\pm 0.15$      | $\pm 0.20$       | $\pm 0.23$       | $\pm 0.00$         | $\pm 0.18$       | $\pm 0.26$       |
| Vaginal Dryness**    | 0.00***          | 1.54             | 1.89            | 0.00***         | 0.21             | 0.15             | 0.00***            | 0.06             | 0.07             |
|                      | $\pm 0.00$       | $\pm 0.27$       | $\pm 0.11$      | $\pm 0.00$      | $\pm 0.15$       | $\pm 0.10$       | $\pm 0.00$         | $\pm 0.06$       | $\pm 0.07$       |
| Vaginal Itching**    | 0.54             | 0.38             | 1.00            | 0.07            | 0.14             | 0.23             | 0.06               | 0.06             | 0.07             |
|                      | $\pm 0.27$       | $\pm 0.14$       | $\pm 0.17$      | $\pm 0.07$      | $\pm 0.10$       | $\pm 0.12$       | $\pm 0.06$         | $\pm 0.06$       | $\pm 0.07$       |
| Dyspareunia**        | 0.00***          | 0.23             | 0.33            | 0.00***         | 0.07             | 0.08             | 0.00***            | 0.00***          | 0.00***          |
|                      | $\pm 0.00$       | $\pm 0.12$       | $\pm 0.17$      | $\pm 0.00$      | $\pm 0.07$       | $\pm 0.08$       | $\pm 0.00$         | $\pm 0.00$       | $\pm 0.00$       |

\* n = Number of patients

\*\* Based on severity scale: 0 = no symptom or normal, 1 = mild, 2 = moderate and 3 = severe

\*\*\* These values were recorded and are real zeroes

day 29 for each of the three groups and determination of overall significant differences on each visit and from one observation time to the next. The maturation index data on day 57 were subjected to one-way analysis of variance and least significant-difference tests.

The severity ratings of vaginal symptoms and of atrophic vaginitis for the three groups were compared at each visit by the non-parametric Kruskal-Wallis test followed by a procedure<sup>2</sup> for making pairwise group comparisons. Wilcoxon's Signed Rank test was employed to compare successive visits.

### Results

On day one of the study 39 of the patients who had been previously treated with estradiol vaginal cream were rated normal on the severity of atrophic vaginitis. One case of mild atrophic vaginitis and one moderate case were randomized in each of the untreated and placebo cream groups. Five patients complained of vaginal itching: one mild case, one moderate case and one

severe case were in the untreated group and one mild case in each of the other groups. None of the patients complained of vaginal dryness and dyspareunia. Six patients, four in the untreated group and one each in the placebo cream and estradiol cream groups, did not return for the final day visit.

Statistical analysis of the maturation index and the severity of atrophic vaginitis (Table) indicate that at day 29 the conditions of the untreated and the placebo cream groups had significantly ( $p < 0.005$ ) deteriorated from the conditions on day one. Between days 29 and 57 the conditions of these two groups deteriorated even further ( $p < 0.05$ ). The conditions of the group on daily dosage of 0.1 mg micronized estradiol in vaginal cream did not change significantly ( $p > 0.05$ ).

In the untreated group all other symptoms of atrophic vaginitis showed a trend of deterioration at days 29 and 57. The severity of vaginal dryness in the untreated group was significantly higher than in either of the other groups. A significant ( $p < 0.05$ ) difference in the severity of vaginal itching and dyspareunia exists, when the un-

treated group is compared with the estradiol cream treated group.

In the estradiol cream treated group, the severities of vaginal dryness, vaginal itching and dyspareunia had sustained at remission during the two month period.

### Discussion

The decline of glandular production of estrogen in postmenopausal women is often accompanied by symptoms of estrogen deficiency characterized by vaginal atrophy and vasomotor disturbance. We have established<sup>1</sup> previously that a daily administration of 0.2 mg estradiol in a vaginal cream relieves such symptoms. Our present study demonstrates that patients, who had been relieved of atrophic vaginitis by topical estrogen therapy, relapsed when the therapy was discontinued. To remain free of symptoms, most patients require extended exogenous estrogen replacement therapy. This study shows that a daily dosage of only 0.1 mg estradiol in a cream is sufficient. The choice of 0.1 mg dosage for maintenance therapy was arbitrary. However, the clinical results on 15 patients indicated that the dosage was adequate for the two month period. This estradiol vaginal cream is formulated at 0.1 mg per each gram of the cream in a disposable unit. It is possible to titrate each patient's dosage according to her need.

Several other dosage forms of estradiol are available. The subcutaneous pellet implantation of estradiol is effective but inconvenient. Tablets containing estrone, estradiol and estriol offers a combination of estrogens. Estradiol, in its usual crystalline state, is known<sup>4,5</sup> to be less satisfactory than other orally administered estrogens. Micronized estradiol tablets are highly effective orally<sup>6</sup>. The present estradiol vaginal cream is intended as a supplement to the oral micronized tablets in a convenient topical dosage form.

The benefits of estrogen replacement therapy have been well documented. The risks of prescribing exogenous estrogen have been confusing and contradictory<sup>7</sup>. However, one cannot ignore the potential risks. A recommended practical therapy<sup>8,9,10</sup> is the cyclic administration employing the smallest effective dose of estrogen. Our previous study<sup>1</sup> gave clinical support to Rigg et al<sup>11</sup> and Martin et al<sup>12</sup> that the daily administration of 0.2 mg micronized estradiol in a cream

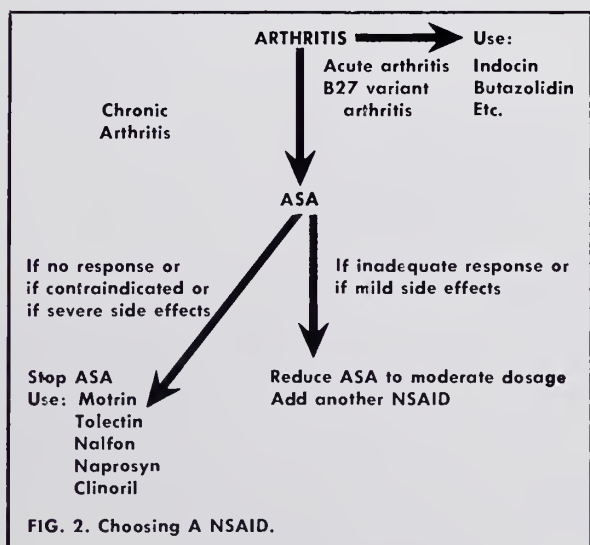
base would sustain a physiological mid-follicular phase premenopausal estradiol level. This study indicates that a reduced daily administration of 0.1 mg estradiol in cream is adequate as an extended therapeutic regimen.

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### EDITOR'S NOTE

Due to a printing error in the June issue of *The Journal*, Figure 2 on page 288 was incomplete.







Doctor Pfefferbaum

## "World of Cancer" Wednesday Morning's Theme at KMA Annual Meeting

Scheduled to speak Wednesday morning, September 26, is Betty Pfefferbaum, M.D., assistant professor of psychiatry and pediatrics at the University of Texas Medical School, Houston.

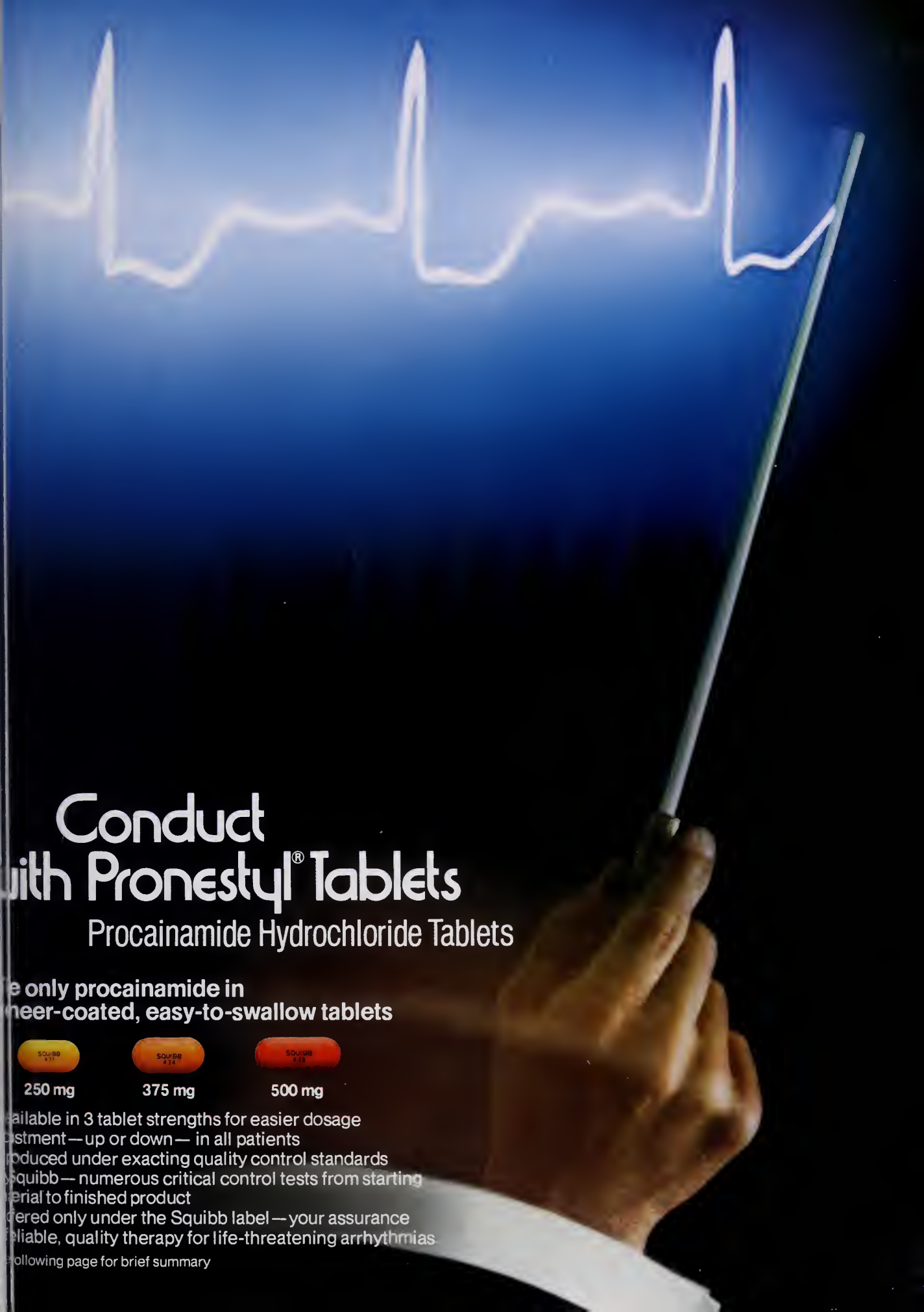
Doctor Pfefferbaum's presentation deals with the psychological aspects of the patient when confronted with cancer. Specific areas of focus will include the doctor-patient relationship and the process of making decisions regarding therapy. The patient's involvement in decisions regarding his own care is extremely important and at times may seem in conflict with the physician's mandate to cure illness and save lives. The realistic and ethical issues of management will be considered.

The Scientific Program sessions of the KMA Annual Meeting are scheduled for September 25, 26 and 27 at the Ramada Inn/Bluegrass Convention Center, Louisville.

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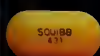
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**DESCRIPTION:** Pronestyl (Procainamide Hydrochloride) is the amide analogue of procaine hydrochloride and is available for oral administration as veneer-coated tablets providing 250 mg, 375 mg, and 500 mg procainamide hydrochloride.

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**PRECAUTIONS:** Evidence of untoward myocardial responses should be carefully watched for in all patients. In the presence of myocardial damage with atrial fibrillation or flutter, the ventricular rate may increase suddenly as the atrial rate is slowed; adequate digitalization reduces but does not abolish this danger. Ventricular tachysystole is particularly hazardous if myocardial damage exists.

The dislodgment of mural thrombi producing an embolic episode may occur in correcting atrial fibrillation due to the forceful contractions of the atrium.

Extreme caution is required in attempting to adjust the heart rate when ventricular tachycardia has occurred during an occlusive coronary episode or where the use of procainamide may result in additional depression of conduction and ventricular asystole or fibrillation as in second degree and third degree A-V block, bundle branch block, or severe digitalis intoxication.

Bear in mind when treating ventricular arrhythmias in patients with severe organic heart disease and ventricular tachycardia that complete heart block, which may be difficult to diagnose, may be present. Since asystole may result if the ventricular rate is significantly slowed without attainment of regular atrioventricular conduction, procainamide should be stopped and the patient re-evaluated.

In the presence of both liver and kidney damage, normal dosage may produce symptoms of overdosage—principally ventricular tachycardia and severe hypotension.

A syndrome resembling lupus erythematosus has been reported with oral maintenance procainamide therapy. Common symptoms are polyarthralgia, arthritis and pleuritic pain. Fever, myalgia, skin lesions, pleural effusion and pericarditis may also occur. Rare cases of thrombocytopenia or Coombs-positive hemolytic anemia, possibly related to this syndrome, have been

reported. Measure anti-nuclear antibody titers at regular intervals in patients on procainamide for extended periods of time or in whom symptoms suggestive of lupus-like reaction appear; in event of rising titer (anti-nuclear antibody) or clinical symptoms of LE, assess the benefit/risk ratio related to continued procainamide therapy (see boxed Warning). Steroid therapy may be effective if discontinuation of procainamide does not cause remission of symptoms. If the syndrome develops in a patient with recurrent life-threatening arrhythmias not otherwise controllable, steroid-suppressive therapy may be used concomitantly with procainamide.

**ADVERSE REACTIONS:** Hypotension is rare with oral administration. Serious disturbances of cardiac rhythm such as ventricular asystole or fibrillation are more common with I.V. administration.

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A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

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# A Clinical Approach to the Choice of Antimicrobial Agents, Case Number 7: Aspiration pneumonia

Martin J. Raff, M.D. and Julio C. Melo, M.D.  
Louisville, Kentucky

This is the seventh in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics.

A 63-year-old caucasian male derelict was brought to the emergency room by the police after being found in an alley. He had apparently spent a cold night wrapped around a bottle of wine and was in an obtunded state with dried vomitus on his clothing. His temperature was 97°F, respirations 24/min, BP 90/40 mm Hg., pulse 120/min. His few remaining teeth were carious and had rotted crowns. There was severe periodontitis and his breath was malodorous. There was dullness to percussion in the area of the thorax defining the right lower lobe, along with rhonchi, rales and amphoric breath sounds. His liver was enlarged and the spleen tip palpated just under the left costal margin. The hemoglobin was 9.1 gm/dl and hematocrit 34%. WBC count was 8,900/mm<sup>3</sup> with 76% neutrophils, 6% bands, 12% lymphocytes and 6% monocytes. Chest x-ray revealed patchy infiltrates throughout the right lower lobe with a visible air bronchogram and a small area of cavitation containing an air fluid level. A small amount of right pleural effusion was evident. The patient was admitted to hospital, gradual warming begun and an IV was started with D5W containing thiamine and other vitamins.

Further attempts at appropriate diagnosis should now include each of the following except:

- A. Transtracheal aspirate with aerobic and anaerobic cultures and gram stain.
- B. Thoracentesis with aerobic and anaerobic cultures and gram stain.
- C. Lumbar puncture (following a computerized axial tomographic brain scan if available).

D. Aerobic and anaerobic blood cultures.

E. Bronchoscopy with cultures of the bronchoscopic aspirate.

**Answer: E. Bronchoscopy may not be indicated here.**

A lumbar puncture was performed in an attempt to assess the etiology of the patient's obtundation. The cerebrospinal fluid (CSF) was normal with the exception of a protein of 47 mg/dl. Since he was not producing sputum, a transtracheal aspirate was performed in an effort to ascertain the etiology of his pneumonitis. The material obtained from the transtracheal aspirate had a feculent odor and on gram stain revealed gram-positive cocci of multiple sizes and shapes in different configurations, a variety of gram-positive rods, pleomorphic gram-negative rods, and gram-negative diplococci. Thoracentesis yielded purulent fluid with a gram stain similar to that of the transtracheal aspirate. Blood cultures are drawn in patients with pneumonia in order to obtain the organism causing the infection in cases in which it is not recovered from the sputum or when the sputum specimen obtained is not reliable as being indicative of what is present in the lower respiratory tract; to assess the extent of disease and the potential for extrapulmonic complications; and to help to determine the prognosis. Bronchoscopy is a poor means by which to obtain cultures. Passage of the bronchoscope through the oropharynx results in the material obtained for culture being contaminated with oropharyngeal flora. Bronchoscopy may be indicated for lavage and removal of foreign bodies when these are suspected.

The major indications of the presence of anaerobic pleuro-pulmonary infection are infection in the lung with evidence of tissue necrosis (abscess, empyema, necrotizing pneumonia); a subacute or chronic condition; confirmed or suspected aspiration; anaerobic periodontal disease; feculent or foul sputum or empyema; multiple morphologic forms of bacteria on gram stain of exudative materials; and failure to isolate a likely

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pathogen from aerobic cultures<sup>1</sup>. The patient described here fulfilled virtually all of these criteria. It should not be assumed that his pneumonia is acute, as it may have been present for days to weeks prior to his admission to hospital.

Therapy should now be instituted with one of the following choices

- A. Clindamycin (Cleocin®) 300 mg po qid and Tobramycin 80 mg IM q 8h.
- B. Chloramphenicol 1 gm IV q 6h.
- C. Penicillin G, 2.5 million units IV q 6h.
- D. Carbenicillin (Geopen®, Pyopen®) 500 mg/kg/day in 4 equal doses.
- E. Cefoxitin (Mefoxin®) 2 gms IV q 6h.

**Answer: C. Penicillin, about 10-12 million units per day intravenously.**

Aspiration pneumonia usually occurs secondary to compromised consciousness or difficulty with deglutition or impaired gag reflex with aspiration of oropharyngeal contents and their bacterial flora. Alcoholism is one of the most frequent causes of depression of sensorium in these patients and the material aspirated includes upper respiratory secretions. These secretions contain both aerobic and anaerobic bacteria in counts of  $10^9$ /ml and often result in pleuropulmonary infection with abscess formation and empyema. The nature of the various organisms in a mixed infection will influence the choice of drugs. It will usually be unnecessary to provide antimicrobial coverage for each individual bacterial isolate present. Since the clinical presentation and results of the gram stain of clinical exudates in this case

suggested mixed anaerobic pleuropulmonary infection and the majority of these organisms are likely to be sensitive to penicillin, this is the best choice. Although each of the other choices given is likely to provide adequate antimicrobial coverage and to result in successful resolution of the clinical illness, there are relative contraindications for the use of each of these.

These contraindications may include toxicities, alteration of normal flora with secondary superinfection, problems in methods of administration, added costs, and others. Penicillin is inexpensive, easy to administer, safe and effective. There will be instances in which penicillin-resistant anaerobes may be isolated, particularly *Bacteroides fragilis*. If this occurs, and the patient has failed to respond clinically to therapy with penicillin, treatment can then be altered to specifically include coverage against each organism felt to be pathologically significant. Usually this will mean clindamycin and/or an aminoglycoside.

In fact, when *B. fragilis* is part of a mixed flora in anaerobic pleuropulmonary infection the patient may still respond to penicillin<sup>2</sup>. Ordinarily doses of 10 million units a day are adequate for the treatment of penicillin susceptible cases of anaerobic pleuropulmonary infections<sup>3</sup>.

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Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.

# The Bone Marrow As An Organ: The Morpho-Kinetic Approach to Anemia, A Blueprint for Understanding

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Anemia is a common clinical problem. A few considered facts about the blood smear (CBC) and marrow function allow an easy solution to most anemias. When this approach is routinely applied, the clinician can expect to increase his skills in understanding anemias, to save his time and energy in the workup of the patient with anemia, to avoid complicated classification schemes, and to avoid undue complications of overtreatment. Mostly, his patients will receive better medical care.

Anemia remains one of the most misunderstood and poorly solved problems in current medical care. Too often, a shotgun approach is taken in the management of the patient rather than an orderly approach based on an understanding of the reasons for the anemia. Consequently, too few or too many tests may be ordered in the workup, or the patient may simply be treated empirically.

## A. Steps in the Diagnosis of the Patient with Anemia:

1. Does the patient have anemia?
2. What are the Morphologic characteristics of the anemia?
3. What is the mechanism of the anemia?
4. What is the underlying cause of the mechanism?
5. What is the best form of treatment?

### Step 1. Does the Patient have Anemia?

Anemia may be defined as a reduction in total circulating red cell mass. As such, anemia is a

symptom and not a disease, per se. Hemoglobin and Hematocrit determinations are universally taken as indirect measures of adequate red cell mass. Generally these values will prove to be valid indicators of anemic states. Sometimes, however, such values alone may be misleading when the plasma volume is expanded (spurious anemia). Further, an occasional female patient or adolescent patient may present with low hemoglobin in the 11-12gms. % range. Such patients, if put through extensive and expensive testing, will prove not to be anemic at all but rather represent normal biological variants.

### Step 2. What are the Morphologic characteristics of the Anemia?

Morphology of the red blood cells on "pushed" smears has always provided excellent clues as to the cause of anemia (Table 1). In fact, personal examination by the physician of a well-prepared, well-stained smear should be considered as the extension of the physical exam of the patient and should not be deferred entirely to a technologist's opinion. Red cell indices are also helpful and readily available with CBC determinations run on automated equipment. These values provide valuable information about average parameters of the red cells. The MCV is particularly helpful in assessing red cell size and should be correlated with size estimates from the smear as a quality control check.

An old rule of thumb suggests "that RBC size changes occur in the bone marrow whereas RBC shape changes occur in the peripheral blood".

### Step 3. What is the mechanism of the anemia?

All anemias are caused by one or combination of three basic mechanisms: A. decreased production, B. increased destruction, or C. blood loss. (Fig. 1)

A. Decreased Production. The concept of the bone marrow as an organ is important to our understanding of its function both in health and dis-

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**Table 1**  
**Morpho-Kinetics of Anemia**

| Type | RBC Size/Shape  | Cause   |
|------|---|---|
| I    | Normal or   | Acute Blood Loss  |
|      | Anisocytotic or Microcytic  | Early Fe Deficiency<br>Intrinsic RBC Defects<br>Chronic Conditions<br>Pyridoxine Deficiency<br>Bone Marrow Aplasia<br>Sideroblastic Anemias |
| II   | Poikilocytosis<br>Macro-ovalocytes  | Macrocytic Anemias  |
| III  | Spherocytes<br>Micro-ovalocytes   | Hemolytic Anemias<br>Congenital Spherocytosis   |
| IV   | Target Cells<br>Tactoids<br>Clams<br>Tetrads<br>Sickle Cells                                | Hemoglobinopathies<br>Thalassemic Syndromes<br>Post-splenectomy   |
| V    | Burr Cells<br>Schistocytes<br>Helmet Cells<br>Stomatocytes<br>Acanthocytes<br>Blister Cells | Uremia<br>Jaundice<br>Dissem. Intravascular<br>Coagulation (D.I.C.)<br>Cardiovascular Structural<br>Lesions                                 |

ease. A few terms are first in order. "Erythropoiesis" is the process by which red blood cells form, mature, and are supplied from within the marrow. This process is further characterized as effective versus ineffective erythropoiesis (Fig. 2). "Erythrokinetics" stands for the various dynamic events which occur during erythropoiesis, such as hormonal stimulus, hemoglobin synthesis, iron utilization, red cell formation, and delivery of red cells to the peripheral blood. A steady state is maintained when a precise balance is achieved between the amount of red cell mass removed from and the amount delivered to the peripheral blood per unit of time. The sum of the total marrow and circulating red cell tissue thus formed constitutes the "erythron". The erythron thereby connotes a valuable functional expression of the unity of the red cell mass and its precursors. The steady state condition of normal hemoglobin values is maintained by adjustments of the erythron through the process of erythrokinetics. Anemic states, on the other hand, result from a reduction of the erythron by one of the three mechanisms given above. Under such conditions, a new steady state of balance is maintained at a different but low level or the state may be unsteady and continuing to change (worsening

anemia) until a new balance can be achieved. When combined with traditional clues from the morphology of the red cells present, these kinetic considerations hasten our understanding of the functional cause underlying the anemia.

The reticulocyte count is the key test for initial assessment of marrow function. Since the average mature red cell lives about 125 days in the circulation, 1% or so of the total circulating red cell mass is replaced each day by young red cells (reticulocytes). The retic count thus becomes an excellent marker for the daily turnover of red cells with the degree of replacement matching the degree of loss. Moreover, the retic response will vary with the severity of the loss and therefore the severity of the anemia (Table 2).

From the information provided by the retic response, the anemia can be determined to be

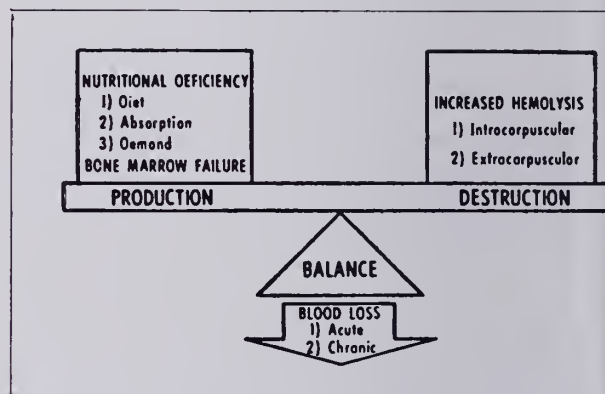


FIG. 1: The Three Primary Mechanisms of Anemia.

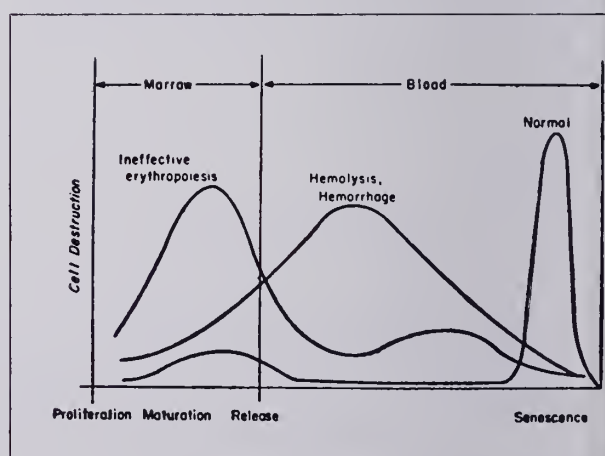


FIG. 2: Depiction of the components of total erythropoiesis. The amount of red cell mass which does not survive to reach the peripheral circulation or which has greatly reduced survival after reaching the circulation is termed "Ineffective Erythropoiesis". The amount which has normal survival upon reaching the circulation is termed "Effective Erythropoiesis". Anemia results from uncompensated increase in component of ineffective erythropoiesis.

either a low-output or high-output process, as far as the marrow is concerned, somewhat analogous to low output—high output heart failure (Table 3).

A word of caution is advised in the interpretation of retic counts as they are usually reported in numbers of retics per 1000 RBC's and not as absolute numbers or concentration expressions. This practice is unfortunate since elevation of a raw retic count percentage above 1.5% occurs as the hematocrit drops without there occurring any real increase in actual numbers of retics present. For an elevated retic count to reflect evidence of bone marrow reticulocyte production, it must be converted to an absolute count (Retic % X RBC) or corrected to a normal hematocrit of 45 (Table 4).

Finally, for the marrow to be judged to be functioning adequately and maximally for the circumstances, the adjusted retic response must be gauged against what the marrow can be expected to produce under optimal conditions and for that particular level of anemia. The marrow can increase daily production maximally about six-eight times normal. It does this by doubling its red cell cellularity at the expense of marrow fat (putting on new assembly lines) and by decreasing the inter-phase mitotic time (speeding up assembly lines three-four times).

**B. Increased destruction.** Intra-vascular hemolysis is characterized by high output marrow function and build up of red cell break down products in the blood such as elevated total bilirubin, indirect bilirubin, serum hemoglobin and increased excretion of urinary urobilinogen. Chronic, prolonged hemolysis may eventuate also into low-output bone marrow failure from nutritional deficiency, most notable folic acid deficiency. Here again, the morpho-kinetics of the situation would indicate two mechanisms at fault for the combined anemia.

**C. Blood loss.** Acute blood loss is usually fairly obvious clinically. Chronic blood loss may be more subtle and be suspected only after a detailed history or evidence of iron deficiency are obtained. Chronic blood loss most often occurs from the GI or GU tract and must be presumed due to something serious until proven otherwise. Initially, blood loss will be characterized by a high-output marrow production but eventually converts to low output as iron deficiency develops. Conversely, iron deficiency anemia in the

**Table 2**  
**Normal Response to Anemia**

| Patient<br>Hct | Retic Count % |           |          | Marrow<br>Production Index |
|----------------|---------------|-----------|----------|----------------------------|
|                | Raw           | Corrected | Adjusted |                            |
| 45             | 1.0 /         | 1.0 /     | 1.0      | 1                          |
| 35             | 6.5 /         | 5.0 /     | 2.5      | 2-3                        |
| 25             | 14 /          | 7.8 /     | 3.9      | 3-5                        |
| 15             | 15 /          | 8.0 /     | 4.0      | 4-8                        |

**Table 3**  
**Morpho-Kinetics of Anemia**

- I. High-Output Marrow Response
  - Hyperplastic marrow
  - Decreased M:E ratio
  - Retic count > 50,000
  - Production index ↑ and
  - Appropriate for level of anemia
- II. Low Output Marrow Response
  - A. Normoplastic-Hypoplastic marrow
    - M:E ratio N or ↑
    - Retic count < 50,000
    - Production Index ↓
    - Effective Erythropoiesis ↓
  - B. Hyperplastic marrow
    - M:E ratio ↓
    - Retic count < 50,000
    - Production Index ↓
    - Ineffective Erythropoiesis ↑

**Table 4**  
**Retic Count Conversion**

1. "Corrected" Retic Count =  $\frac{\% \text{ retic} \times \text{Hct}}{45}$
2. "Adjusted" Retic Count =  $\frac{\text{"Corrected" Retic}}{2 \text{ (*Retic Maturation time)}}$
3. Retic Production Index =  $\frac{\text{"Adjusted" Retic}}{1.0}$

\* Regular maturation time of young retics in the marrow takes about two days prior to their delivery to the circulation. The adjusted retic count is derived from dividing the corrected retic count by 2 in moderate to severe anemias since the maturation time delay in the marrow has been shifted to the peripheral blood—Hence the term "shift reticulocytes".

adult patient is due to chronic blood loss until proven otherwise. Such patients over 40 years of age must be suspect to have occult carcinoma of the bowel.

#### **Step 4. What is the underlying cause of the mechanism?**

Most of the common anemias will be related to blood loss or nutritional deficiency states. Their



**Table 5**  
**Morpho-Kinetics of Anemia**

|     | RBC size | MCV   | Retic Ct. | Cause                                |
|-----|----------|-------|-----------|--------------------------------------|
| I   | nc/nc    | → N → | > 50,000  | = Blood Loss/<br>Hemolysis           |
| II  | nc/nc    | → N → | < 50,000  | = Chronic Infection/<br>Drugs—Toxins |
| III | mic/Hypo | → ↓ → | < 50,000  | = Fe Deficiency                      |
| IV  | mac/nc   | → ↑ → | < 50,000  | = Vit. B <sub>12</sub> —Folate ↓     |
| V   | mac/nc   | → ↑ → | > 50,000  | = Rx Response/<br>Severe Hemolysis   |

nc/nc = Normochromic/normocytic  
mic = Microcytic  
Hypo = Hypochromic  
Mac = Macrocytic

morpho-kinetic features are summarized in Table 5. More complicated anemias have to do with unexplained bone marrow failures or specific extra-corpuscular or intra-corpuscular RBC defects. These latter cases may require detailed study by an experienced hematologist.

#### Step 5. What is the best form of treatment?

The best form of treatment follows the best determination of the cause for the anemia. Specific indications for blood replacement through blood

transfusion should be based on the patient's immediate physiologic need for improved oxygen carrying capacity. Goals for asymptomatic levels of hemoglobin should be sought and not necessarily those of "normal" levels of hemoglobin. Certainly, hemoglobin levels alone should not be treated. Transfusion for expediency sake for elective surgery or whatever is to be discouraged. Wherein possible, the safest remedial approach is to allow the patient to rebuild his or her own blood upon correction of the basic defect.

In summary, anemia should first be substantiated as real. Its major cause is then localized as due either to blood loss, decreased bone marrow production, or increased intravascular destruction. Specific investigation by appropriate testing is made to pinpoint essential elements in one or more of these mechanisms. Meanwhile the physician will have practically solved the majority of anemias encountered daily and prepared the way for further systematic study in obscure cases. Above all, the empirical approach of simply transfusing a low hemoglobin without elucidating the cause would be eliminated.

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## EDITORIAL

### Comforting Certainties

"... Medicine of the whole person." Mr. Z was pleasant, but insistent. "My wife needs a doctor and I want to know if you practice medicine of the whole person." He was quite certain of the meaning of his phrase, but I wasn't at all sure what his particular definition of it meant to him. So now we will see her and find out if I practice what he preaches.

Undoubtedly he is sincere and we will likely find plenty of common ground. Possibly he read an article or heard a program saying that many different elements must be considered in dealing with illness and suggesting that this is a revolutionary concept. Such articles seem to give rigid criteria and promise marvellous results, but suggest that most physicians instead avoid a unitized approach through selfishness or ignorance. These articles go on to decry particularly, specialization and the scarcity of old-time values like house calls. Sometimes we are pilloried for our hesitancy about Laetrile, Senator Kennedy, megavitamins, lumpectomies and the economics of generic drugs.

What I would like to help Mr. Z understand is that, quite sincerely, physicians are often wrong and do not always manage to see every aspect of all illnesses in each person treated. But most of us try—sometimes by design, often by instinct. Some physicians actually treat only an anus or an asthma. Some are greedy. Some are in deep trouble. Some are dishonest. But most are not. Most are meticulous, conservative and cautious because experience has so taught us. Before the splendid complexity of *Homo sapiens* dealing daily with his ills, an honest physician stands humble, quizzical and charmed.

Yes, the physician tires. Our practices are not always exhilarating or even rewarding. We may fail to integrate, to see the big picture. I'll venture that I could come up with more examples of physician failure than Mr. Z ever dreamed possible, but I could come up with the opposite, too. I could tell him of the successes when in internist

sensed instinctively that a case of asthma could not be dealt with by medicines alone—the sufferer must first leave the parental home. There was the ophthalmologist who knew inflammation could not be vanquished until the too busy executive developed a new purpose. There was a psychiatrist who sensed that an addict must find a faith to displace the craving.

I wish him to know further, that we can all give instances of inexplicable cures, of people who couldn't possibly get well—but they did! And when this happens we feel awe, not embarrassment at our failure in prognostication. Somehow I would like to get over to Mr. Z that humans are more complicated than he can possibly imagine.

I have seen primitive people from remote and undeveloped areas of the world who simply shrugged off what they could not understand, refusing even to look at an airplane or listen to a voice from a box. It is simpler. It requires no effort or involvement. One can sympathize with this very human inclination to stay with comforting certainties, with an understandable 'never' and a dependable 'always'.

The good doctors I know do most certainly practice medicine of the whole person, but it is not as a result of study or of reading a book. It comes as naturally with the healing process as does breathing. Truth cannot conflict with truth. But we cannot demand full explanations for everything that we see. There is much in medicine that requires us to gaze in wonderment, storing away experiences that may eventually be useful to us or to our patients. So far we can scarcely explain all that happens on a cell membrane; certainly we cannot explain all that happens in a cell, or an organ, or an organism.

Medicine of the whole person? We are all for it, Mr. Z, but please don't shy away if it develops that your wife's depression is related to your intellectualizations and your emotional aloofness.

DLS





## EDITORIAL

**T**HE paper, "Treatment of Atrophic Vaginitis," in this issue relates to the use of vaginal estrogen creams and their effectiveness. An excellent absorption effect has been shown. The problem is the risk of the absorbed estrogen as a factor in the initiation of endometrial cancer. The increased relative risk ratio of endometrial cancer has been reported in six papers as four to 12 times the usual incidence in women when they have received oral or intramuscular estrogens (usually Premarin). In the paper by Gray, Christopherson and Hoover (1977),<sup>1</sup> there were included three patients who had received Premarin vaginal cream and who developed endometrial cancer. In the control group there were five who had received the same medication and had not developed endometrial cancer during the period of observation.

Local estrogens, in the form of creams (my personal experience over a 40-year-period has been with Premarin vaginal cream) is, indeed, a valuable adjunct for the treatment of patients with atrophic vaginitis. That local estrogens may relieve menopausal symptoms, as hot flashes, nervousness, insomnia, various aches and pains, would appear related to the absorption of more estrogen from the vagina than usually given for atrophic vaginitis. One gram of Premarin vaginal cream applied once weekly usually will relieve atrophic vaginitis.

Absorption from the vagina at times is quite obvious, as shown by the breast reactions. Mastalgia, lumpiness, thickening and even macrocysts of the breasts may appear. The sensitivity of the breast to small doses of estrogens varies greatly; some women have no reaction whatever, but others develop marked tenderness and thickenings after the smallest amount of estrogenic substance.

The fact that the breasts may be very reactive to vaginal estrogen indicates there is systemic absorption. On the other hand, the lower the dose of estrogen given orally or by injection has smaller risk ratios for endometrial cancer than the higher doses.

From our experience, we believe that estrogens do not cause breast cancer, but that marked reac-

tions may occur which may mask a breast cancer and certainly cause most uncomfortable symptoms and concern. On the other hand, there is no question that estrogens do promote endometrial cancer in a small number of women. In our series, the overall risk ratio was 3.1, as compared to the nonuser of hormones. Only 1.8 percent of our patients who received Premarin and had intact uteri developed endometrial cancer.<sup>2</sup> In special circumstances, estrogen may be given to an individual patient with an intact uterus with proper supervision. These patients are appraised of the increased risks involved after any estrogen.

That vaginal estrogens may relieve hot flashes, in addition to atrophic vaginitis, means that a considerable absorption of estrogens occurred through the vagina. To achieve that result, the daily use of the vaginal creams likely is in higher dose than necessary to relieve atrophic vaginitis.

Vaginal creams containing estrogens, used judiciously, may be followed by remarkable relief of atrophic vaginitis and dyspareunia. They are valuable adjuncts in medical therapy.

Estrogens administered by the vaginal route in large enough doses to relieve menopausal symptoms (as hot flashes) may have the same possibilities of promoting endometrial cancers as other methods of administration of estrogens. The report in this issue of the *Journal* reveals absorption of vaginal estrogen on the one hand, but does not address the possibility of the stimulation of endometrial cancer because of the short periods of observation.

This paper has been well designed and is supported by a recent report by Horwitz and Feinstein (1979)<sup>3</sup> which suggests that there is no increased risk with the use of estrogen cream. But a long period of follow-up with this therapy is necessary to prove its complete lack of risk.

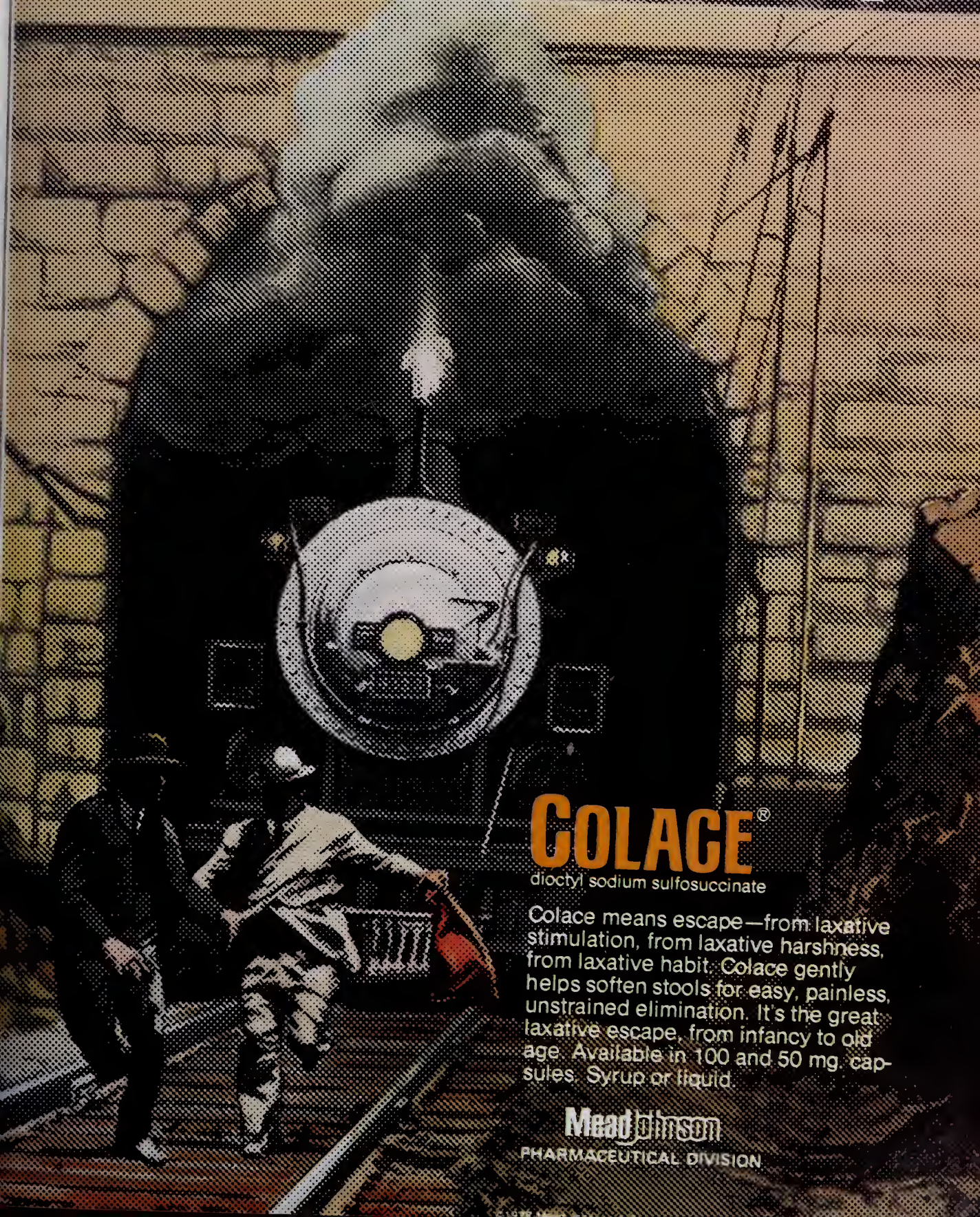
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LAMAN A. GRAY, SR., M.D.



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**Dosage:** Vasodilan tablets, isoxsuprine HCl, 10 mg. and 20 mg. Vasodilan injection, isoxsuprine HCl, 5 mg., per ml.

**Usage and Administration:** Oral: 10 to 20 mg., three or four times daily. Intramuscular: 5 to 10 mg. (1 or 2 ml.) two or three times daily. Intramuscular administration may be used initially in severe or acute conditions.

**Contraindications and Cautions:** There are no known contraindications to oral administration when administered in recommended doses. Should not be given immediately postpartum or in the presence of arterial bleeding.

Parenteral administration is not recommended in the presence of hypotension or tachycardia.

Intravenous administration should not be given because of increased likelihood of side effects.

**Adverse Reactions:** On rare occasions oral administration of the drug has been associated in time with the occurrence of hypotension, tachycardia, nausea, vomiting, dizziness, abdominal distress, and severe rash. If rash appears the drug should be discontinued.

Although available evidence suggests a temporal association of these reactions with isoxsuprine, a causal relationship can be neither confirmed nor refuted.

Administration of single dose of 10 mg. intramuscularly may result in hypotension and tachycardia. These symptoms are more pronounced in higher doses.

For these reasons single intramuscular doses exceeding 10 mg. are not recommended. Repeated administration of 5 to 10 mg. intramuscularly at suitable intervals may be employed.

**Supplied:** Tablets, 10 mg., bottles of 100, 1000, 5000 and Unit Dose; Tablets, 20 mg., bottles of 100, 500, 1000, 5000 and Unit Dose; Injection, 10 mg. per 2 ml. ampul, box of six 2 ml. ampuls.

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**Adverse Reactions:** Theophylline may exert some stimulating effect on the central nervous system. Its administration may cause local irritation of the gastric mucosa, with possible gastric discomfort, nausea, and vomiting. The frequency of adverse reactions is related to the serum theophylline level and is not usually a problem at serum theophylline levels below 20 mcg/ml.

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Doctor Copeland

## "Recent Advances in Medical Practice" is Theme of Thursday's Scientific Session At KMA Annual Meeting

Donald L. Copeland, M.D. will speak Thursday morning, September 27, on "The Significance of Antithrombin III in Primary Care."

Doctor Copeland is Director of the Clinical Laboratory Family Practice Center, Bowman Gray School of Medicine in Winston-Salem, North Carolina.

His presentation will deal with the definition of Antithrombin III and the mechanism of action of Antithrombin III that inhibits specific clotting factors. It will also include discussion of the clinical problems in primary care related to Antithrombin III.

The KMA Annual Meeting, September 24-27, at the Ramada Inn/Bluegrass Convention Center will include four scientific sessions, 20 scientific speciality meetings and two meetings of the House of Delegates.





A reminder

# ZYLOPRIM<sup>®</sup>

(allopurinol)

100 and 300 mg scored Tablets

- inhibits uric acid formation
- helps prevent urate crystal depositions in synovia
- reduces risk of uric acid lithiasis

**INDICATIONS AND USE:** This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim<sup>®</sup> (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease.

Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

**In patients receiving Purlinethol<sup>®</sup> (mercaptapurine) or Imuran<sup>®</sup> (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptapurine or azathioprine. Subsequent adjustment of doses of Purlinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.**

**Usage in Pregnancy and Women of Childbearing Age:** Zyloprim<sup>®</sup> (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

## ADVERSE REACTIONS:

**Dermatologic:** Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

**Gastrointestinal:** Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

**Vascular:** There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angitis which have led to irreversible hepatotoxicity and death.

**Hematopoietic:** Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim<sup>®</sup> (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

**Neurologic:** There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

**Ophthalmic:** There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

**Drug Idiosyncrasy:** Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

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## GRAND ROUNDS



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This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

### Crystal Induced Arthritis - Cellular And Molecular Mechanisms

Crystals which have been implicated in the causation of human arthritis are monosodium urate, which is associated with gout, calcium pyrophosphate dihydrate in pseudogout, calcium hydroxyapatite, and adrenocorticosteroid esters, which can cause the post injection flare. Of these, gout has been a subject for humorists as well as the center of scientific controversy since the era of the ancient Greeks. Its status as a disease of the wealthy, the "high livers" and the intellectuals has survived in myth, if not in fact.

In this paper I would like to give an overview of the various hypotheses and experimental studies explaining the cellular and molecular mechanisms involved in crystal induced arthritis.

#### History

Hippocrates attributed gout to an excessive amount of phlegm, one of the bodily humors that settled within the joints. The scientific era of the study of gout began in the 18th century with the isolation of uric acid from renal calculi. In the 18th century Sir Alfred Garrod, using the crude thread test,<sup>1</sup> found excessive amounts of uric acid in the blood of patients afflicted with gout. Since then there has been continued debate as to the relationship between excessive uric acid in blood and the very active, acute inflammatory arthritis known as gout.

Over the past centuries and up to the last couple of decades the interrelation between hyperuricemia and the clinical picture of gout was the subject of real controversy. In the last 15-18 years experiments have provided evidence for the theory that the deposits of crystals of monosodium urate (MSU) are involved not only in

the tophaceous aspect of gout, but also in the pathogenesis of the acute attack. We now regard the acute attack (as did Garrod) as an inflammatory reaction evoked by these crystals.

#### MSU Crystals and Gout

In the early 1960's McCarty and Hollander demonstrated the presence of extra- and intracellular monosodium urate crystals in the synovial fluid of patients with acute attacks of gout.<sup>2</sup> Subsequently, Seegmiller and associates and McCarty and his colleagues showed that the injection of microcrystals of sodium urate into joints of animals and man produce a clinical picture indistinguishable from spontaneous gouty arthritis.<sup>3,4</sup> Injection of like quantities of amorphous urate or sodium urate in isotonic solution produced no inflammation. These findings suggested that the inflammatory reaction resulted from the physical property of the crystals, rather than from the chemical effect of sodium urate, and led to a unitary concept of how crystal-induced synovitis might occur. According to this concept, precipitation of sodium urate crystals from hyperuricemic body fluids initiates an inflammatory reaction. Phagocytosis of these crystals occurs, resulting in the release and activation of polypeptides which mediate the pain and inflammation. Possible local changes in pH would further decrease urate solubility, and lead to additional crystallization.

*Why MSU Crystals are Deposited in the Connective Tissue*

Monosodium urate is deposited almost exclusively in the connective tissue of patients with gout. These crystals may be found in cartilage, synovia, tendon sheaths, subcutaneous layers of the skin, and even in the interstitial areas of the kidneys. However they are conspicuously absent from muscle, brain, liver, spleen and lungs.

*From the Department of Medicine, University of Louisville School of Medicine, Louisville, Kentucky.*



It is well known that hyperuricemia is required for the formation of monosodium urate crystals and the development of gouty arthritis. Nevertheless, hyperuricemia alone is apparently not sufficient for crystallization to occur, as shown by the Framingham study<sup>5</sup> in which only 17% of hyperuricemic individuals had an attack of gouty arthritis. Prevalance of gouty arthritis was found to increase with rising uric acid levels.

Using bovine nasal cartilage as a prototype of connective tissue, Katz showed that this substrate caused a threefold augmentation of solubility when compared to buffer control.<sup>6</sup> The solubilizing substance in the cartilage was an acid mucopolysaccharide or glycosaminoglycan, a class of polysaccharide consisting primarily of chondroitin sulfate. Katz isolated a small fragment (PPL) from the mucopolysaccharide. This PPL is a highly polymerized molecule which tends to interdigitate with similar molecules to form a meshlike network, and was found to readily solubilize urate. PPL also prevented the complete crystallization of urates from a supersaturated solution even when provoked by seeding, temperature change or agitation. However, when digested with trypsin it failed to solubilize the urate, indicating that the integrity of the PPL molecule was required for the phenomenon of solubilization.

On first inspection the concept that connective tissue components prevent crystallization is inconsistent with the observation that tophaceous deposits are indeed scattered throughout the joints of patients with gout. However, if proteolytic enzymes are added to solution of PPL saturated with urate, the PPL becomes disrupted and can no longer hold the urate in solution; urate crystallization then occurs. This model holds true not only for bovine nasal, but also for human articular cartilage. Katz and co-workers proposed that a similar mechanism may exist *in vivo*.

Connective tissue metabolism is actually quite dynamic: proteoglycan is being formed, degraded and reformed constantly. Dingle and others have shown that this turnover is mediated by lysosomal enzymes.<sup>7</sup> These lysosomal enzymes released into small packets or microcosms digest adjacent proteoglycan that has entrapped urate molecules in the hyperuricemic subject. Because altered proteoglycan can no longer solubilize it, deposition of urate occurs. Over a period of years these deposited urates coalesce and form tophi.

*Why Don't All Patients With Hyperuricemia Develop Gout?*

The hypothesis is that gout results from the relationship between elevated uric acid and accelerated connective tissue metabolism. Accelerated connective tissue metabolism can be measured by analysis of serum proteoglycan and glycosaminoglycan determinations. Connective tissue metabolism in patients with gout was shown to be almost three times normal.<sup>8</sup> Ten patients with idiopathic hyperuricemia also exhibited normal or minimally elevated values.

### Nucleation of MSU

The first attack of gout in a hyperuricemic individual may be considered as a nucleation event. An interesting *in vitro* study examined the factors favoring the nucleation of MSU.<sup>9</sup> It showed that calcium ions decreased the solubility of urate, but dramatically enhanced urate nucleation. Other factors which enhanced such nucleation were acid pH and mechanical shock.

### Calcium, Acidosis and Gout

This strong enhancement of nucleation and growth by calcium ion is very exciting in that it may explain why the incidence of gout is much higher in men than in women, with the difference diminishing with increasing age. Clinically, calcium ion tends to be higher in men, but the difference decreases steadily with age. It is also known that the ionized calcium concentration in plasma increases as pH falls. Thus any factors which lower the pH enhance the probability of urate crystallization in both a direct and especially indirect fashion.

### Alcohol, Trauma and Gout

It is interesting to note that gouty attacks may be precipitated by alcohol ingestion combined with fasting. Serum lactic acid concentration is increased by alcohol consumption and fasting. Since synovial membrane is quite permeable to ions, one would expect the synovial fluid to decline similarly in pH. Trauma precipitating gout can be explained by the influence of mechanical shock on nucleation or as a result of decrease in pH secondary to trauma.

However the magnitude of the pH change in synovial fluid is small. Even if significantly greater ranges could be achieved at a subcellular level then uric acid, more likely than urate, would form. Joint diseases other than gout may cause acidification of synovial fluid, yet when hyper-

uricemia coexists in these patients urate does not predictably deposit. The theory in itself also does not explain why some individuals with high serum uric acid develop gout and not others.

### Crystal Induced Inflammation

Once crystals appear in the joint cavity, the acute inflammatory response begins. The salient features of crystal-induced inflammation include the appearance of free urate crystals in the joint cavity, phagocytosis of the crystals, release of mediators of inflammatory response and termination of the acute gouty attack.

### Phagocytosis

Crystals either formed *de novo* or released into joint cavity from adjacent avascular tissues absorb immunoglobulin G (IgG) from synovial fluid.<sup>10</sup> Since there are Fc receptor sites on the surface of polymorphonuclear leukocyte (PMN), phagocytosis is enhanced. The crystals are taken into phagosomes which then merge with the primary lysosome to form a phagolysosome. Within this newly formed phagolysosome the adsorbed plasma proteins are either displaced by other molecules or removed by enzymatic digestion, re-exposing the crystals.

Urate crystals cause the rupture of phagolysosomal membrane. This membranolysis is postulated to be hydrogen bond mediated. No damage to leukocyte membrane occurs when MSU crystals are incubated with these cells in the presence of fluoride, which blocks phagocytosis.<sup>11</sup>

Studies by Weissman and Rita<sup>12</sup> using artificial lipid membranes or "liposomes", showed that cholesterol is required for membrane vulnerability to MSU crystals. When these liposomes were made "male" or "female" (i.e. produced in the presence of androgen or estrogen) the "female" liposomes were more resistant to destruction by the urate crystals. Phagolysosome lysis is accompanied by the release of hydrolytic enzymes into the cytoplasm resulting in cellular autolysis, increased permeability of the outer membrane and release of enzymes into the extracellular medium.

### Inflammatory Mediators

A number of inflammatory mediators are thought to participate in the acute gouty attack. These include Hageman factor, kallikrein, kinins, complement, lysosomal hydrolases, histamines, prostaglandins, etc. Hageman factor was assigned a pivotal role in a proposed sequence of reactions

responsible for the inflammatory process of acute gout. These mediators have also been shown to play an important part in producing or augmenting the inflammatory reaction. Recent experiments by Webster, *et al* suggest that multiple mediators function in the development of the inflammatory process induced by MSU crystals.<sup>13</sup>

Phelps and his colleagues<sup>14</sup> discovered a non-dialysable chemotactic factor with a molecular weight of about 8500 daltons which is released from PMN after monosodium urate phagocytosis. Diamond crystals which also are phagocytosed do not cause the release of this factor, nor do they induce inflammatory response. Colchicine, at levels approximately obtained with the usual therapeutic doses, predictably blocks the release of this factor by at least 50% after MSU crystal phagocytosis. The appearance of chemotactic factor activity can be abolished by preincubating the cells with actinomycin D, an agent that interferes with the synthesis of messenger RNA.<sup>15</sup> This result suggests that chemotactic factor activity is produced by induction of new protein synthesis, either the factor itself, or a protein that modulates its activity, rather than by direct activation of a precursor protein.

The self-limited nature of the acute gouty attack is one of the most intriguing aspects of the acute inflammatory response. Removal of sodium urate from the joint cavity by diffusion, aided by increased blood flow, slow breakdown of urate to allantoin by lysosomal myeloperoxidase, and release of corticosteroids from adrenal cortex as a general stress response to the arthritis, all may help to terminate the attack.

### Colchicine

Any explanation of acute gouty inflammation must account for the remarkably specific effects of colchicine. This drug does not have any effect on either the serum urate concentration or the urinary excretion of uric acid, or on the solubility of urate in plasma. Colchicine is a weak anti-inflammatory agent.<sup>16</sup> This does not explain why the drug is clinically effective in acute gout, but in very few other inflammatory disorders. The answer would seem to lie in one or more peculiarities of gouty inflammation *per se*. One such peculiarity may be the complete reversibility of untreated acute gouty arthritis; at least in the early years of this disorder, unlike patients with rheumatoid arthritis, gouty individuals spend most of



their time free from inflammatory complaints. In other words inflammatory triggers in gout are not persistent.

A number of PMN functions are affected by colchicine *in vitro*.<sup>17</sup> It suppresses the specific release of granular enzymes from PMN by inhibiting the fusion of lysosome with phagosome. As described earlier it suppresses the generation of the chemotactic factor, and it also inhibits the random mobility of human PMN. Colchicine may have an anti-prostaglandin action. Both colchicine and blood from colchicine-treated patients inhibited adherence of human PMN to glass beads, and so perhaps to vascular endothelium. Colchicine also interferes with the integrity of the mitotic spindle by interfering with normal organization of microtubules.

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SARAMMA CHERIAN, M.D.



Doctor Baehner

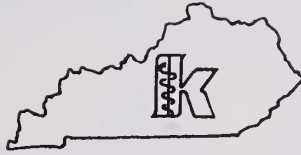
## Dr. Baehner Will Discuss "Childhood Cancer" at KMA Annual Meeting

Wednesday morning, September 26, Robert L. Baehner, M.D., will speak on "Current Status of Chemotherapy in Childhood Cancer."

This presentation deals with the role of chemotherapy in the management of childhood malignancies. Single agent therapy has given way to combination chemotherapy which provides an attack on cancer cells at multiple, biochemical and cytological target sites.

The future role of the family physician, his acquaintance with the principles of chemotherapy, and its limitations and benefits will also be discussed.

Doctor Baehner is Director, Pediatric Hematology-Oncology, James Whitcomb Riley Hospital for Children, Indiana University School of Medicine, Indianapolis.



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## ASSOCIATIONAL NEWS



### University of Louisville Presents Ad Astra Awards at Spring Graduation

Loman C. Trover, M.D., was awarded the University of Louisville School of Medicine's Ad Astra Award for his distinguished service to medicine.

Doctor Trover is chairman and medical director of the Trover Clinic, Madisonville, which has a staff of 70 physicians representing all specialty areas.

Wilson W. Wyatt, Sr., former Louisville mayor and Kentucky Lieutenant Governor, also won the Ad Astra Award. Wyatt was chairman of the coordinating committee which planned the construction of a new University Teaching Hospital Complex at the University of Louisville Health Sciences Center.

### AMA Annual Meeting in Chicago, July 22

The annual meeting of the House of Delegates of the American Medical Association will be held July 22-26 in Chicago at the downtown Chicago Marriott Hotel.

Hoyt D. Gardner, M.D., Louisville, will be inaugurated as president of the AMA, succeeding Tom E. Nesbitt, M.D., of Nashville, Tenn.

The July annual meeting will consist only of House of Delegates sessions. The traditional scientific program of postgraduate courses, lectures, symposia, exhibits and other events will be presented at the AMA Winter Scientific Meeting in San Antonio, Texas, January 12-15, 1980.

### Annual Report of CME Activities

The Kentucky Medical Association CME committee, under direction of the House of Delegates, is again undertaking the annual collection and computation of the membership's CME activities.

The program resulted from a 1976 House of Delegates action. It is voluntary, but participation is strongly encouraged by the House and Board of Trustees.

The reporting form is located in this issue of the *Journal*. Please fill it out and return to the KMA Headquarters office by August 15.

Records are kept for three years and are available to you upon request. If you have recently received the AMA Physician's Recognition Award you need not fill out the form. Attach a copy of your certificate to the reporting form and return.

If you have any questions please contact the KMA office.



Doctor Trover received the Ad Astra Award at the University of Louisville Medical School graduation ceremonies on May 13.

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## Activities Keep Participants Busy at Annual Emergency Care Seminar

Ambulance races, an Army MAST helicopter, paramedics, nurses, physicians and administrators—all were part of the 9th Annual Emergency Medical Care Seminar. Designed as a continuing educational opportunity, more than 500 people attended the seminar at the Ramada Inn/Bluegrass Convention Center, June 6th and 7th.

Included in the activities were speakers discussing coronary care problems, neurological emergencies, respiratory problems, and an eight-hour course in cardiopulmonary resuscitation (CPR) presented by the Louisville Area Chapter of the American Red Cross.

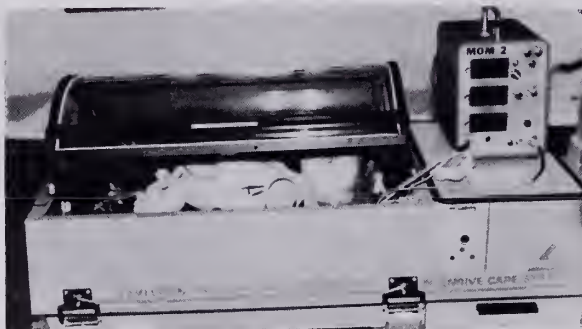
The Emergency Care Seminar was sponsored jointly by the Kentucky Medical Association and the Kentucky Department for Human Resources.



Paramedics from Kentucky and Indiana were judged on their performances in simulated emergency medical situations.



An Army MAST helicopter flew in from Fort Campbell, Ky. to display its emergency medical equipment.



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## Headquarters Activity

### JUNE

- 6-7 Emergency Medical Care Seminar, Louisville
- 7 LCCME Meeting, Chicago
- 12 Journal Editors, Louisville
- 13 McDowell Fund Raising Committee, Danville
- 26 6th District Trustee Meeting, Bowling Green

### JULY

- 10 Journal Editors, Louisville
- 12 KPHA Annual Meeting, Owensboro
- 22-26 AMA Annual Meeting, Chicago
- 23 AAMSE Editors' Meeting, Chicago

### AUGUST

- 8-9 Board of Trustees Meeting, Louisville

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## Members in the news

### HONORS BESTOWED

Doctor Yosh Maruyama has been awarded two clinical fellowships by the American Cancer Society for 1979-1980. Doctor Maruyama is Professor and Chairman of Radiation Medicine at the University of Kentucky, Lexington.

### IN MEMORIAM

**CHARLES F. MOLLER, M.D.**  
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Charles F. Moller, M.D., 57, died May 21, 1979, in Lexington. Doctor Moller was a 1947 graduate of the McGill University of Medicine. He was a member of the American Society of Anesthesiologists, Kentucky Medical Association, Kentucky Society of Anesthesiologists, American Medical Association and the Fayette County Medical Society.



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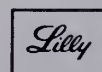
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You know what it takes to make a doctor. The motivation. The years of study and training. The dedication. The hard work.

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This was evidenced in a recent Harris Poll. In measuring public respect for U.S. leadership, it showed a drastic drop in the past five years. And "a majority of Americans is currently willing to express a 'great deal of confidence' in only one profession—medicine—on a list covering 16 types of activity." And that list included Congress and the Supreme Court.

People still look at their doctors as men to be respected and as men of integrity.

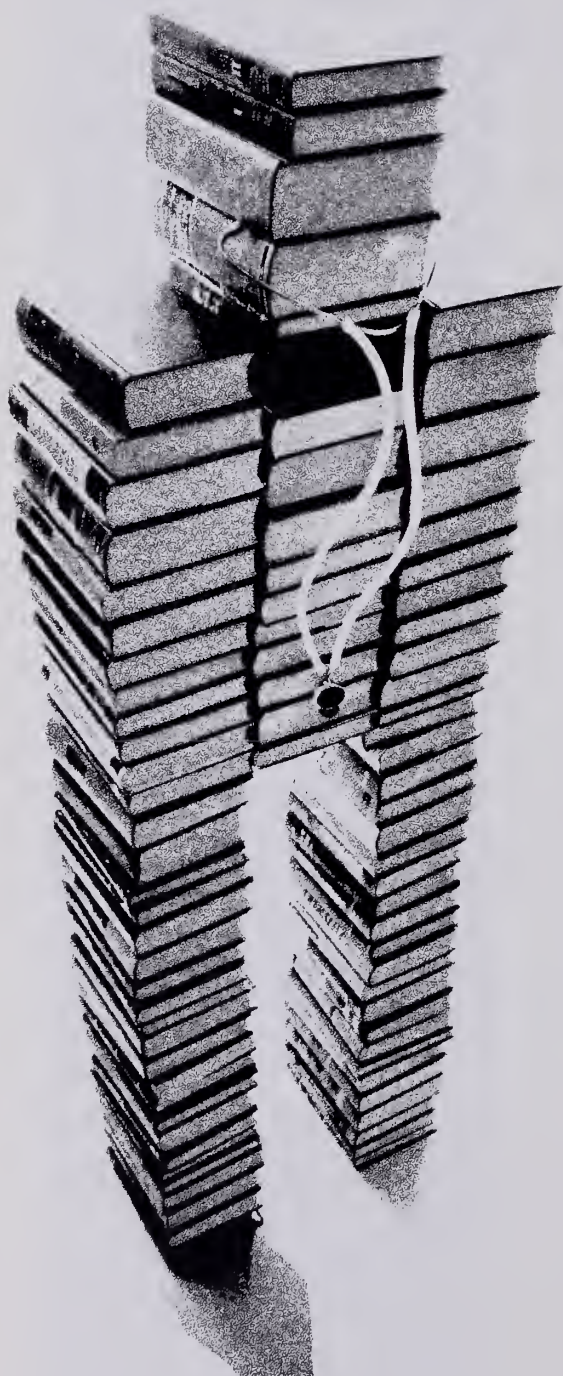
This is the true story of the American doctor. And one which the AMA is constantly telling the public as part of its communications program.

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WE CAN DO MUCH MORE TOGETHER.**

American Medical Association  
535 North Dearborn Street/Chicago, Illinois 60610



# For recurrent attacks of urinary tract infection in women

## Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

### Just one tablet b.i.d. for 10 to 14 days

- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.



**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage:** For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morgani*. **It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination.** Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

**Urinary Tract Infections:** Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

| Weight |     | Dose—every 12 hours |                          |
|--------|-----|---------------------|--------------------------|
| lbs    | kgs | Teaspoonfuls        | Tablets                  |
| 20     | 9   | 1 teasp. (5 ml)     | ½ tablet                 |
| 40     | 18  | 2 teasp. (10 ml)    | 1 tablet                 |
| 60     | 27  | 3 teasp. (15 ml)    | 1½ tablets               |
| 80     | 36  | 4 teasp. (20 ml)    | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30                      | Usual standard regimen     |
| 15-30                         | ½ the usual regimen        |
| Below 15                      | Use not recommended        |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).



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**Please see back cover.**



Her next attack of cystitis may require

# the Bactrim<sup>TM</sup>

## 3-system counterattack



ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

## Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.

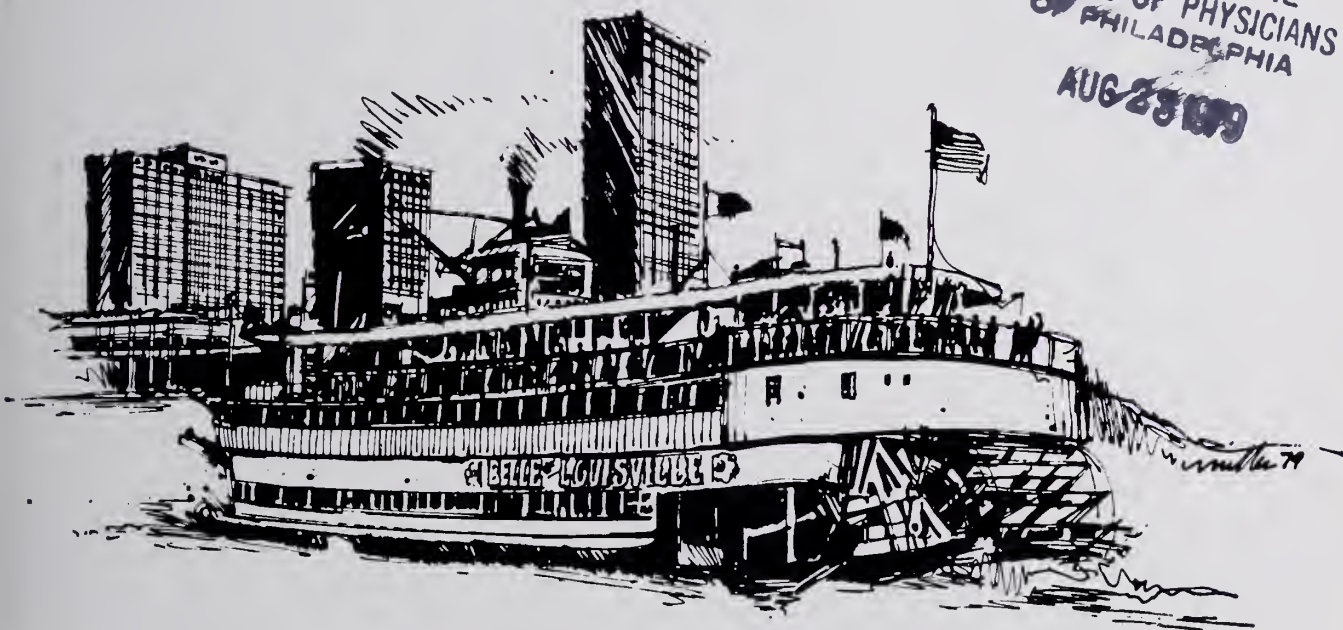
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The  
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# KMA Annual Meeting

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FOUR GENERAL SCIENTIFIC SESSIONS, TWENTY SPECIALTY MEETINGS

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# A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

## Valium®<sup>IV</sup> diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets  
a prudent choice in psychic  
tension and anxiety

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

**Usage in Pregnancy: Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

**Dosage:** Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

**Supplied:** Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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# MESSAGE FROM THE PRESIDENT

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## WHY?

A recent editorial in one of our leading papers was so well written and to the point concerning Senator Kennedy's National Health Insurance Program, that I wish I could reprint it in its entirety. That not being the case, I will try to summarize the salient points and I hope that none of the impact will be lost.

The article began with the heading "Conscription For Doctors"—that of course, is quick to get our attention. Then the author proposed that the N.H.I. plan of Senator Kennedy was not unlike conscription in that one entire class of professionals would be brought under government rule and regulation to the point of dictating our fees and that of hospitals. A ceiling would be placed on total health care spending, and the entire health care industry would come under total control of the federal government.

The article also points out a fact which I have used in my talk on cost containment, that the U.A.W., A.F.L. & C.I.O. are raising hell about cost containment when they are involved, but they are in favor of health care being controlled. Where are all the strong voices for rights when we are under attack?

As I have often stated, and as it is pointed out in the editorial, medical care is only one facet of our economy which is vital to human survival. Without adequate food, housing or clothing good health is impossible, yet we have no clamor for nationalization of the industries which supply these important services.

On the other hand, could it be that health care is just the first major step toward total nationalization and the the American people are being led to slaughter?

The countries which have N.H.I. have not seemed to improve the availability, quality or cost as we have been led to believe, and we all know the inefficiency of government.

Why is it that physicians from all parts of the world leave their countries to come to the U.S.A. to study and practice medicine. Political pressure detracts from the humanistic approach to medical care.

The bureaucrats speak of N.H.I. but is it really an insurance? For that matter, is social security an insurance? If so, they could not last long on the open market. They must continuously be subsidized by the federal government.

Most of the N.H.I. plans seek to eliminate any necessity for Americans to make an economic choice when they utilize health services. The burden will then fall upon the shoulders of the health care providers who, in spite of their strong motivation and ideals, must be deleteriously affected.

Let us hope that a sensible plan can be worked out to furnish care for those who need but cannot afford—and for this I am in hearty support.

The last paragraph of the editorial I will include as a direct quote:

"Mr. Kennedy's proposal makes us wonder what he has against doctors and nurses. For that matter, it makes us wonder what he has against the sick."\*

\*Editorial, *Wall Street Journal*, May 18, 1979

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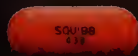
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In the presence of both liver and kidney damage, normal dosage may produce symptoms of overdosage—principally ventricular tachycardia and severe hypotension.

A syndrome resembling lupus erythematosus has been reported with oral maintenance procainamide therapy. Common symptoms are polyarthralgia, arthritis and pleuritic pain. Fever, myalgia, skin lesions, pleural effusion and pericarditis may also occur. Rare cases of thrombocytopenia or Coombs-positive hemolytic anemia, possibly related to this syndrome, have been

reported. Measure anti-nuclear antibody titers at regular intervals in patients on procainamide for extended periods of time or in whom symptoms suggestive of lupus-like reaction appear; in event of rising titer (anti-nuclear antibody) or clinical symptoms of LE, assess the benefit/risk ratio related to continued procainamide therapy (see boxed Warning). Steroid therapy may be effective if discontinuation of procainamide does not cause remission of symptoms. If the syndrome develops in a patient with recurrent life-threatening arrhythmias not otherwise controllable, steroid-suppressive therapy may be used concomitantly with procainamide.

**ADVERSE REACTIONS:** Hypotension is rare with oral administration. Serious disturbances of cardiac rhythm such as ventricular asystole or fibrillation are more common with I.V. administration.

Large oral doses may sometimes produce anorexia, nausea, urticaria, and/or pruritus.

A syndrome resembling lupus erythematosus has been reported in patients on oral maintenance therapy (see Precautions). Reactions consisting of fever and chills have been reported, including a case with nausea, vomiting, abdominal pain, acute hepatomegaly, and a rise in serum glutamic oxaloacetic transaminase following single doses of the drug. Agranulocytosis has been occasionally reported following repeated use of the drug, and deaths have occurred. Therefore, routine blood counts are advisable during maintenance procainamide therapy; and the patient should be instructed to report any soreness of the mouth, throat or gums, unexplained fever or any symptoms of upper respiratory tract infection. If any of these symptoms should occur and leukocyte counts indicate cellular depression, procainamide therapy should be discontinued and appropriate treatment should be instituted immediately. Bitter taste, diarrhea, weakness, mental depression, giddiness, psychosis with hallucinations, and hypersensitivity reactions such as angioneurotic edema and maculopapular rash have been reported.

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## Xeromammography: Historical and Technical Review

Jerry B. Buchanan, M.D. and Barbara F. Weisberg, R.T.  
Louisville, Kentucky

Mammography, the x-ray evaluation of the breast, has had a significant impact on breast cancer detection, diagnosis and management. Technical improvements including xeromammography, negative mode techniques,<sup>1</sup> contact spot xeromammography<sup>2</sup> and various reduced dose techniques have propelled mammography to the forefront in breast cancer detection. The continued success of this radiologic procedure depends on technical and interpretive expertise.

**T**he development of the radical mastectomy in 1891 by Dr. William Halsted<sup>3</sup> was the first major achievement in the management of breast cancer. A second major contribution to breast cancer management was made in the late 1950's when Dr. Robert L. Egan<sup>4</sup> perfected a soft tissue radiographic technique that thrust mammography to the forefront as a practical and reproducible diagnostic method for breast evaluation. With the subsequent revival of interest in the x-ray examination of the breast, and the demonstration of its unexcelled value in detecting early or favorable breast cancers, Dr. John Wolfe<sup>5</sup> in the early 1970's perfected the application of the xeroradiographic process to the examination of the female breast.

*From the Department of Surgery, University of Louisville School of Medicine, Breast Cancer Demonstration Project, 315 East Broadway, Louisville, Kentucky.*

### Historical Review

Chester F. Carlson, a physicist and patent attorney, while studying reproduction techniques in 1937, combined a photoconductor selenium, electrostatic charges, and light exposure to reproduce a graphic image resulting in the invention of Xerography.

Application of the xeroradiographic process to medicine was investigated in the 50's and early 60's by several physicians and scientists. Noteworthy among these early investigators were John F. Roach, Albany Medical College, New York;<sup>6</sup> Frances F. Ruzicka, Jr., St. Vincent's Hospital & Medical Center of New York;<sup>7</sup> and William J. Tuddenham from the Pennsylvania Hospital.<sup>8</sup> Against this background, John N. Wolfe,<sup>5</sup> with certain technical modifications and the close cooperation of Xerox scientists and engineers, developed a machine which was convenient to operate and capable of producing superb images.

### Physical Basis

The xeroradiographic process can best be described in three basic steps. The first step involves placing a positive electrostatic charge on the xeroradiographic plate. This plate has an aluminum base coated with a photoconductor, selenium. By placing this plate through an ionic field, a potential of approximately 1500 volts is applied to the surface of the selenium layer. The charged plate, protected from light and surface damage by a cassette which prevents accidental discharge, is now ready for use and step one is complete.



Step two involves the x-ray exposure of the selenium plate. In effect, the charged plate is used in place of x-ray film. Thus, the recording media is the basic difference between xeroradiography and film radiography. As the photons pass through the object (breast in mammography) they strike the surface of the charged plate with variable energies altered by tissue absorption. This produces a latent image of electrical charges on the selenium plate.

The third step involves transferring this latent image to a visible form for interpretation and storage. This final step, the development phase, is completed by passing the charged plate, now carrying the latent image, through a field of charged toner particles. The charge placed on the toner powder and xerographic plate may be either positive or negative depending on the desired end result of a positive or negative image. An electrostatic method is used to transfer the toner powder to paper from the plate. Using heat, the toner is fused to the paper for interpretation and permanent storage. The plate is then cleansed, relaxed and charged for reuse.

### Technique

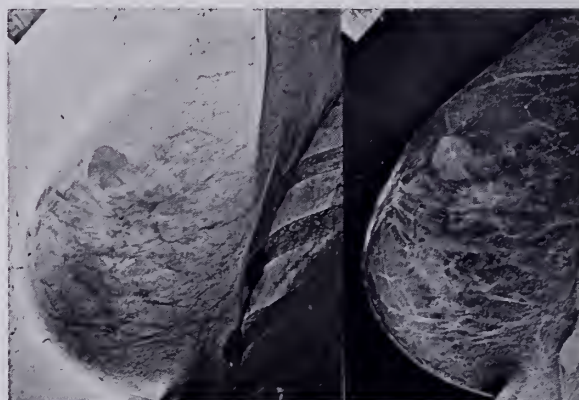
The routine screening xeromammographic examination consists of two views completed at right angles to each other—the craniocaudal and the mediolateral. The craniocaudal projection is taken with the patient seated comfortably at the table. Care should be taken to include as much of the breast as possible. The mediolateral view is taken table top. The patient is rolled into the lateral position until the nipple is in profile. A sponge wedge is placed between the breast and the cassette for support. At this point, extreme care must be taken to eliminate skin folds. Balloon compression is used for all views.

A well-trained, dedicated and experienced technologist, to assure a properly positioned, exposed and developed radiograph, is crucial to the mammographic process. In recent years, her importance has been magnified by her effectiveness as a screening technologist. Decisions regarding single views as a follow up, when negative mode techniques can be used to advantage and when to use compression spot xeroradiography (CSX) can be made by the responsible and qualified technologist.

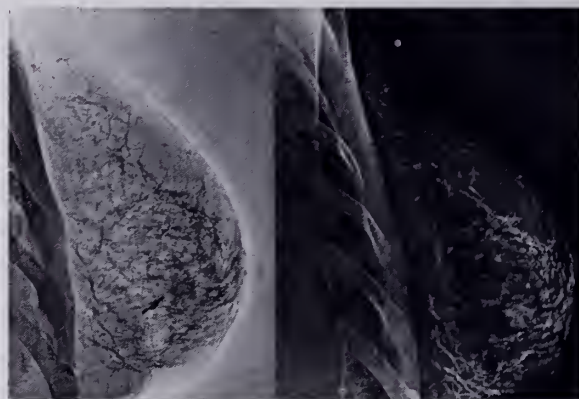
At the University of Louisville, single view follow up examination of the breast has become routine for selected patients. Based on paren-



Fig. 1: A. Mediolateral views of a normal breast in both positive (L) and negative (R) modes.



B. Similar views showing a benign mass.



C. Similar views demonstrating a typical breast carcinoma.

chymal patterns or breast tissue density (this information is obtained from previous mammographic evaluation) the positive or negative mode is selected (Figs. 1 a,b,c). A standard mammographic cone with balloon compression providing a target-to-skin distance or approximately 30 inches (76 cm.) is attached to the tube head. A rotating tungsten anode with an inherent filtration of 0.5 mm aluminum equivalent was initially used with a setting of 52 kV and 200 milliamperes for 1.5 seconds. Added filtration of 1.5

Table 1

## TECHNIQUE AND FILTRATION

| DISTANCE | MA  | TIME     | kV | MODE | ADDED FILTRATION | SKIN DOSE |
|----------|-----|----------|----|------|------------------|-----------|
| 33 in.   | 200 | 4/5 sec. | 53 | Pos. | —                | 2.0 R     |
| 33 in.   | 200 | 4/5 sec. | 58 | Pos. | .5 mm            | 1.4 R     |
| 33 in.   | 200 | 4/5 sec. | 58 | Pos. | 1.0 mm           | .94 R     |
| 33 in.   | 200 | 1 sec.   | 58 | Pos. | 1.5 mm           | .89 R     |
| 33 in.   | 200 | 1 sec.   | 58 | Pos. | 2.0 mm           | .77 R     |
| 33 in.   | 200 | 1 sec.   | 58 | Pos. | 2.5 mm           | .59 R     |

mm of aluminum is now standard procedure. The addition of aluminum filtration will require a change in technique and a change in certain processor parameters. For the initial 0.5 mm of aluminum added filtration, an additional 1-2 kVp must be used. For each increment of 0.5 mm of aluminum thereafter, an accompanying increase of 1 kVp is necessary. Also, the voltage bias on the back of the xerographic plate must be adjusted. Although the optimal back bias voltage will vary from processor to processor, the average change would be from approximately 2,100 volts down to the range of 1,450 volts. This change in back bias voltage accompanied by an increase of one powder burst will recover the contrast lost with the addition of the aluminum filtration. On occasion, the development chamber in the processor will require grounding and there may need to be a slight increase of the pressure within the development chamber. The technical factors and resulting skin doses are noted in Table 1. The crucial absorbed dose to the mid point of the breast is calculated by multiplying the skin dose by 0.20. For a two view examination, this would then be multiplied by two. With the parameter changes, little effect is noted on the resulting images (Fig. 2). Negative mode xeromammograms were obtained using the same tungsten tube and balloon compression. Generally speaking, the exposure time can be decreased by 30% with a concomitant increase in kVp by 1-3. The toner powder used in developing the negative mode images carries a positive charge with the processor delivering 12 powder bursts (this may vary from 12-18) rather than the usual nine powder bursts (this may vary from 7-11) needed for positive mode xeromammography. Additional parameter changes within the processor are unnecessary using the negative mode techniques. It must be stressed that the various processor parameters will naturally require optimizing based on

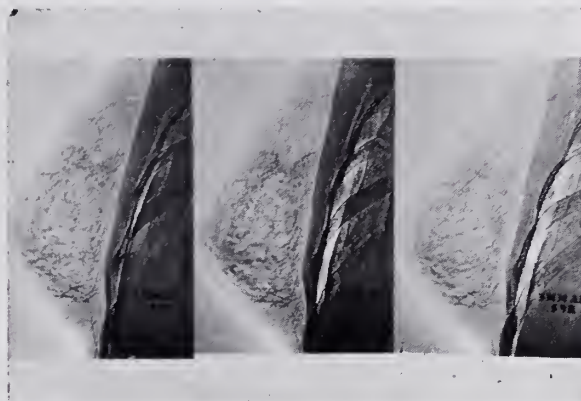


Fig. 2: Mediolateral views of a breast showing little, if any, detail loss with added aluminum filtration. However, processor parameter changes must be made.

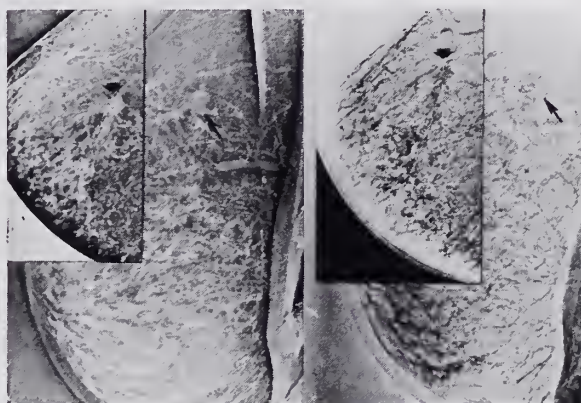


Fig. 3: A. Mediolateral views in negative (L) and positive (R) modes showing ambiguous density on routine exam. Contact spot xeromammography (inserts) reveals small schirrous carcinoma.

individual desires and specific units within the various locations.

To improve the accuracy of xeromammography in breast cancer screening, we have used contact spot xeromammography (CSX) to enhance image detail when findings on the conventional xeromammograms proved ambiguous (Figs. 3 a,b). This technique has now been used in over 2,500 women undergoing some 35,000 examinations.



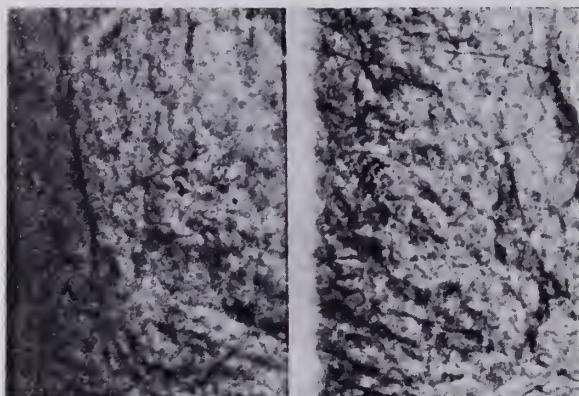


Fig. 3: Photographic blow-up of calcifications as seen on routine view (L). Note marked improvement in resolution on CSX (R).

Contact spot xeromammography (CSX) is performed by use of the upright Senographe mammography unit with the xeroradiography adaptation kit. One of several contoured, cylindrical or rectangular localizers can be used to provide maximum compression. We most frequently use the 18-cm field, 28-cm focal skin distance contoured localizer. For clustered calcifications, the 6-cm diameter, 28-cm focal skin distance cylindrical localizer is selected. For deep-lying masses, calcifications or areas of architectural distortion located close to the retromammary space, the 20 x 6.5 cm. rectangular cone is the localizer of choice. With these smaller diameter localizers and in the very dysplastic breasts, we have found the negative mode technique to be superior (Fig. 4). Imaging in this mode totally eliminates the powder deletion area around the cone margins. As familiarity with negative mode techniques is gained, one will begin to use the negative mode almost exclusively, as we currently do. In fact, the negative mode technique should be employed for small lesions close to the breast periphery to eliminate the powder deletion artifacts. The 0.6 mm focus



Fig. 4: Note improved resolution of mass characteristics in a dysplastic breast using negative mode (R).

Table 2

CSX ADVANTAGES

PRIMARY

- ENHANCES MASS CHARACTERISTICS
- PERMITS DETAILED RESOLUTION OF PUNCTATE CALCIFICATIONS
- RESOLVES AMBIGUOUS AREAS OF ARCHITECTURAL DISTORTION
- IMPROVES DIAGNOSTIC ACCURACY IN DYSPLASTIC BREASTS
- ALLOWS THOROUGH EVALUATION OF ASYMMETRICAL TISSUE DENSITIES

DECREASES BENIGN BIOPSIES—INCREASES CA/BX RATIO

SECONDARY

- DECREASES PATIENT RECALLS
- DECREASES RADIATION EXPOSURE TO PATIENTS
- IMPROVED CREDIBILITY WITH REFERRING PHYSICIANS
- ALLOWS OBJECTIVE EVALUATION OF MAMMO-SCREENERS

DECREASES PATIENT ANXIETY—INCREASES INTEREST OF TECHNOLOGIST

molybdenum target, closer approximation of the area of interest to the image receptor, reduction in scatter secondary to more precise collimation, constant potential generator, maximum breast compression and lack of discernible motion contribute to greatly improved detail and resolution. Primary and secondary advantages of CSX are noted in Table 2.

Summary

Mammography is an integral part of the complete breast evaluation. Reduced dose techniques now available lend support to the application of this technique to the asymptomatic female population. The success of this radiographic process is not only dependent on proper interpretation but a basic understanding of the technique.

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# The Application of Xeromammography

Jerry B. Buchanan, M.D. and Barbara F. Weisberg, R.T.  
Louisville, Kentucky

When the mammographer is presented with a technically satisfactory examination, he must be aware of the primary and secondary signs that lead to the correct diagnosis of malignancy. In addition, he must realize that benign lesions may mimic carcinoma and malignancies may at times appear benign. Certain mammographic characteristics warrant the recommendation for careful observation. Mammography should always compliment a thorough clinical breast examination. The negative mammogram should never dissuade the biopsy of a clinically suspicious finding.

## Interpretation

The interpretation of xeromammograms is carried out using reflected light rather than transillumination. The undisturbed breasts (no underlying pathology or previous biopsy) are almost always mirror images of each other. For this reason, it is very important to compare each image of one breast with the same image of the opposite breast. Asymmetrical variations must be viewed with suspicion and the underlying cause for this asymmetrical presentation must be sought.

The xeroradiographic presentations of a breast malignancy may be divided into the primary characteristics of the lesion itself and its secondary effects on the surrounding tissues.

## Primary Characteristics

(1) Mass. The great percentage (75-85%) of breast cancers are evident by the mass density produced on the xeroradiograph. The typical schirrhous carcinoma images as a stellate density

(Fig. 1a). The nodular presentation (Fig. 1b) and the lobulated lesion (Fig. 1c) are also well recognized appearances on the xeromammogram.

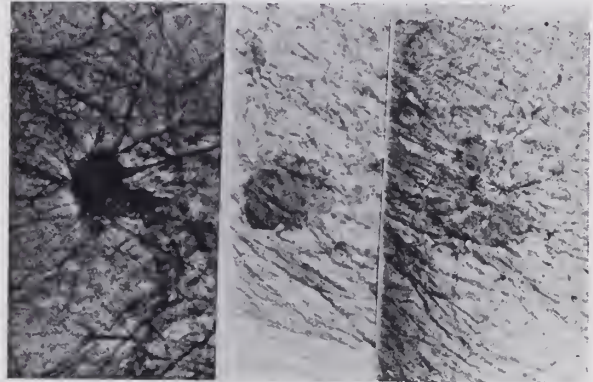


Fig. 1: A. The xeromammographic appearance of a typical stellate carcinoma.  
B. The well known nodular presentation of breast carcinoma.  
C. The lobulated appearance of a breast malignancy.

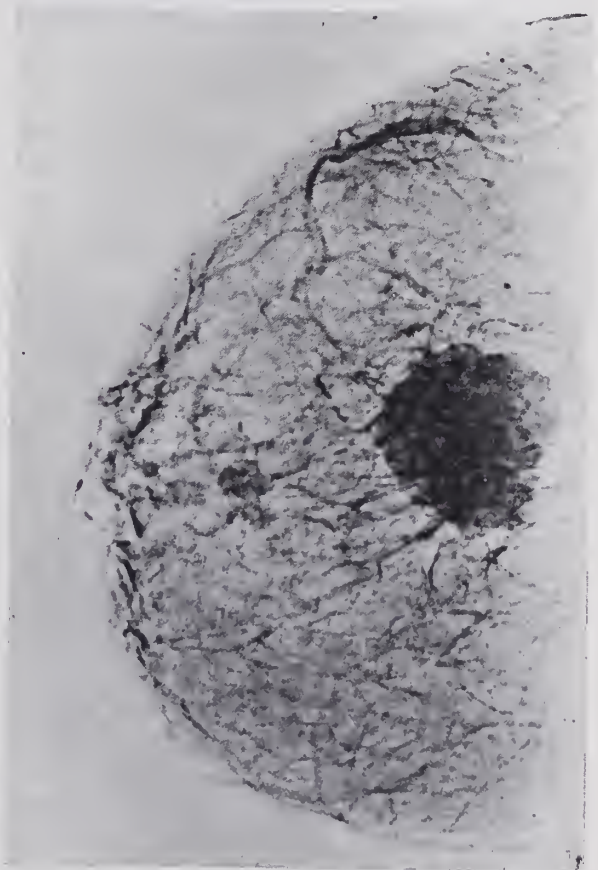
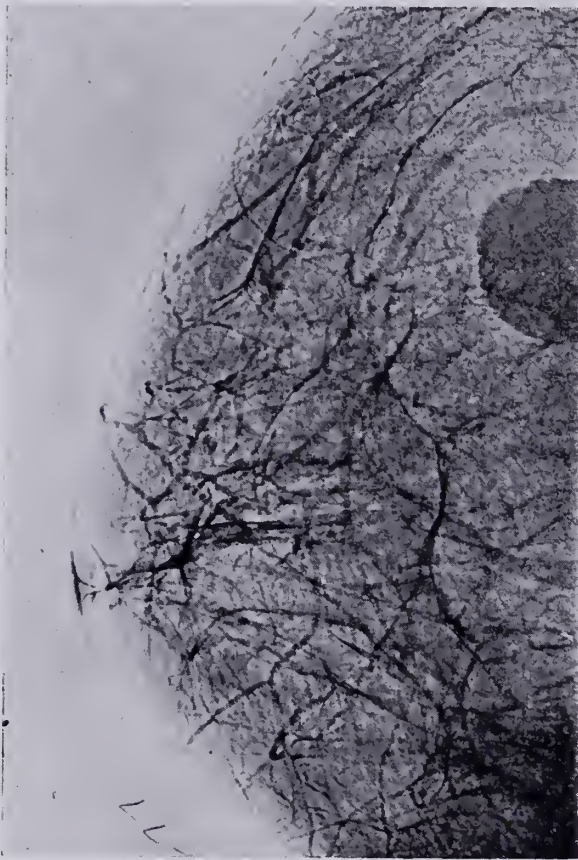


Fig. 2: A. The familiar presentation of a circumscribed medullary carcinoma.

*From the Department of Surgery, University of Louisville School of Medicine, Breast Cancer Demonstration Project, 315 East Broadway, Louisville, Kentucky.*





B. The rare example of a carcinoma within a cyst.

The carcinoma presenting as a well circumscribed mass can present a diagnostic dilemma. Examples of this are the medullary carcinoma (Fig. 2a) and the rare carcinoma arising in a cyst (Fig. 2b).

(2) Calcifications. Typical calcifications (Fig. 3a) leading to the diagnosis of a breast malignancy are imaged in approximately 40% of all cancers. Many times, especially in the screening process, the numerous, tiny, irregular and clustered calcifications are the only clue leading to the detection of an occult and usually favorable carcinoma.

(3) Architectural disturbance. A disturbed or distorted architectural pattern without a definable mass may be the only finding in a certain number of carcinomas (Fig. 4). A scar from previous biopsy and certain benign lesions can produce this same mammographic finding. A careful history should be obtained to differentiate a biopsy scar from an underlying lesion. Often an associated duct response of asymmetrical duct prominence is seen with a malignancy and not visualized with a benign lesion.

(4) Tissue density variation. This diagnosis is only made by comparing one breast with the other (Fig. 5). The lesion has no definable margins and merely blends into the surrounding tissues. In retrospect, this alone accounted for the single finding in most of the interval cancers in our screening program. Once again, secondary findings such as increased vascularity of asym-

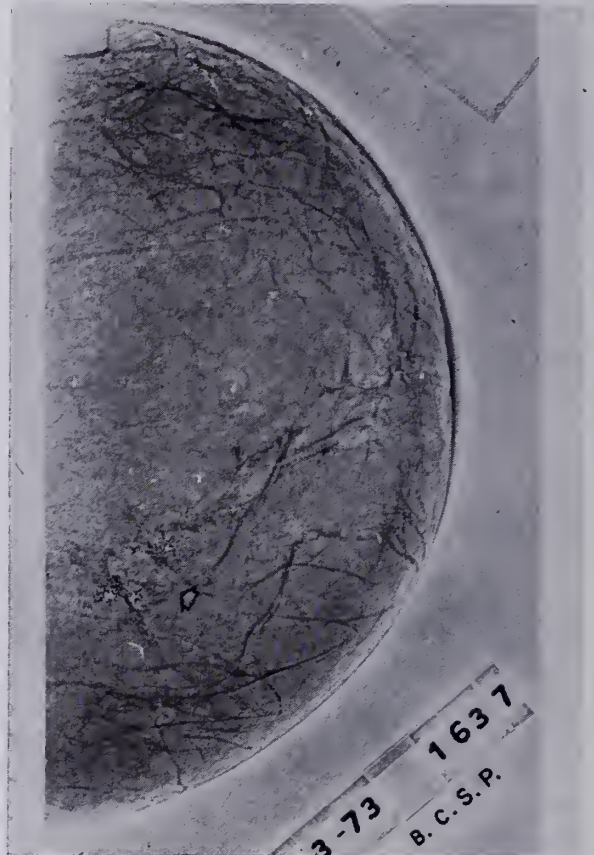


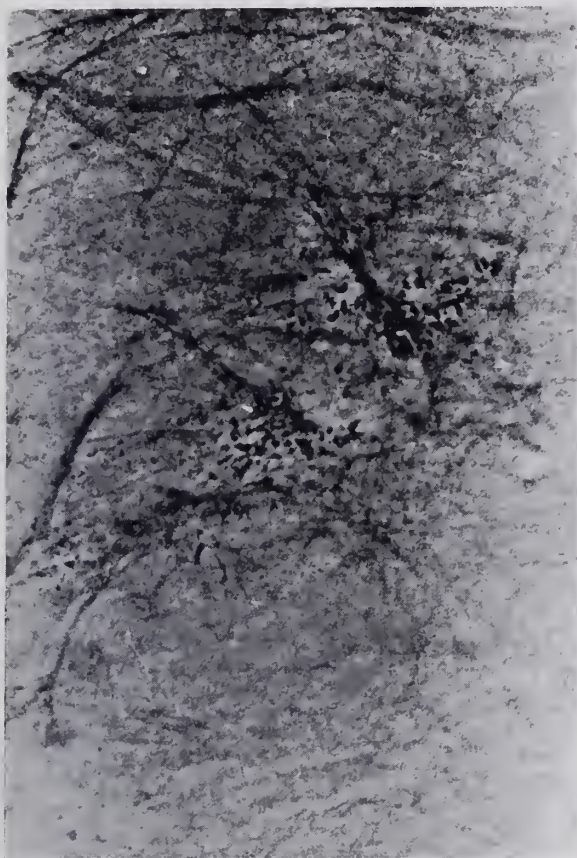
Fig. 3: A. Note the typical clustered, irregular microcalcifications of breast carcinoma.

metrical duct response should be searched for. The positive thermogram may also be of value in this group of patients.

#### Secondary Characteristics

The secondary effects of a breast malignancy on the surrounding tissues have been alluded to. The most important of these is the duct response (Fig. 6). This usually indicates an epithelial proliferation and when present must be viewed with a high degree of suspicion. Subtle masses, calcifications and tissue density variations must be carefully searched for. If none are found, the patient should be carefully observed at regular intervals. Other secondary signs such as increased





B. Photographic blow-up of same calcifications.

vascularity, skin thickening and/or retraction and nipple retraction (Fig. 7) are usually signs of advanced disease and indicative of a poor prognosis. The most common benign lesion which may mimic breast carcinoma are a surgical scar, fat necrosis and sclerosing adenosis (Fig. 8).

#### Parenchymal Patterns

It is becoming increasingly evident that the parenchymal pattern of the breast tissues can be classified into one of four or five useful categories (Fig. 9). The greatest importance of this classification may be its use as an indicator of risk as proposed by Wolfe.<sup>1</sup> The preliminary data is convincing but further analysis is needed.

In our opinion, the classification of breast tissue into parenchymal patterns is of unquestioned value in determining follow up intervals and examination frequency. In our screening experience (Table I), an overwhelming majority (82%) of interval cancers were in breasts with a P<sub>2</sub> or more severe classification. This primarily reflects "misses" or interpretation errors in the more difficult breast but also may reflect an increased risk associated with the proliferative dis-

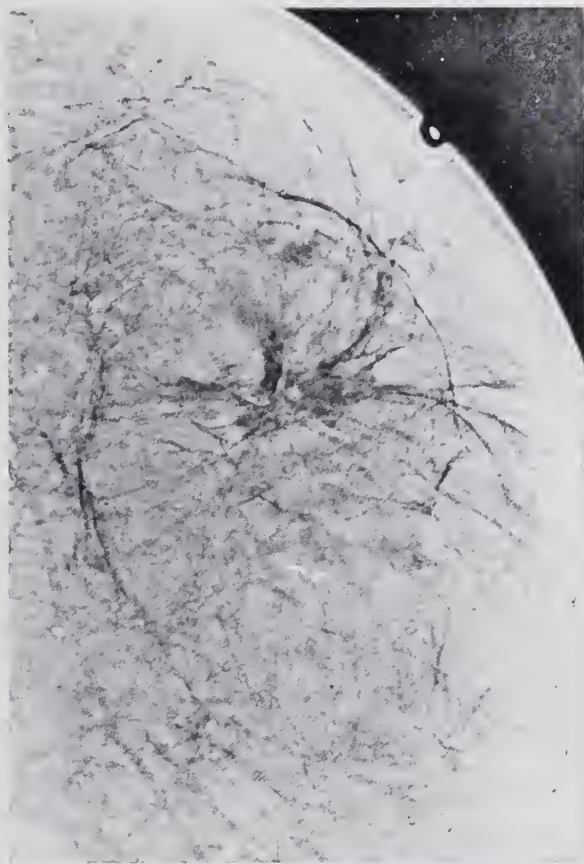


Fig. 4: The occult breast malignancy will many times present as an area of architectural distortion.

order accounting for the classification into the more advanced categories.

#### Film Mammography vs. Xeromammography

The advantages and/or disadvantages of one recording system over the other is generally a reflection of the mammographer's experience and bias rather than the inherent strengths or weaknesses of the system itself. Each system when optimally used will provide the needed diagnosis-

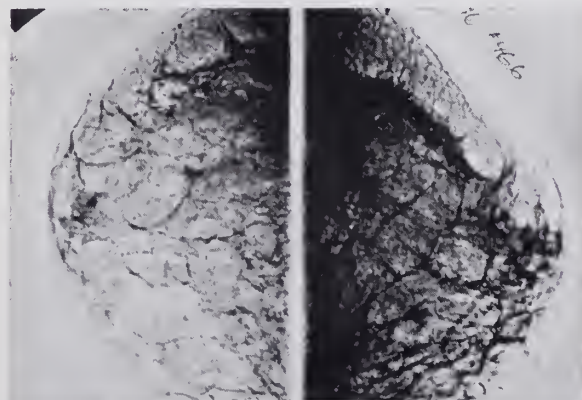


Fig. 5: The generalized increase in tissue density is recognized in the breast on the left only after comparison with the opposite breast (right).



Table 1

## PARENCHYMAL PATTERNS

| GROUP   | N1           | P1             | P2              | DY             | QDY            | TOTAL NO.<br>OF PATIENTS |
|---|--------------|----------------|-----------------|----------------|----------------|--------------------------|
| PATIENTS FREE OF<br>BREAST CANCER—<br>(RANDOM SAMPLE) | 73<br>(6.5%) | 339<br>(30.0%) | 419<br>(37.11%) | 176<br>(15.6%) | 122<br>(10.8%) | 1,129                    |
| PATIENTS WITH<br>PROVEN BREAST CA                     |              |                |                 |                |                |                          |
| ALL CANCER PTS.                                       | 9<br>(7.4%)  | 33<br>(27.3%)  | 53<br>(43.8%)   | 22<br>(18.2%)  | 4<br>(3.3%)    | 121                      |
| INTERIM CA'S  | 1<br>(5%)    | 3<br>(12%)     | 11<br>(44%)     | 8<br>(32%)     | 2<br>(8%)      | 25                       |
| CA'S DETECTED BY<br>BCDDP                             | 8<br>(8.3%)  | 30<br>(31.3%)  | 42<br>(43.8%)   | 14<br>(14.6%)  | 2<br>(2.1%)    | 96                       |

tic information. Of greatest importance in future screening programs may be the ability to record a diagnostic image using new film-screen combinations which allow the use of softer beam radiation. This results in a pronounced reduction in the absorbed radiation to the midpoint of the breast.

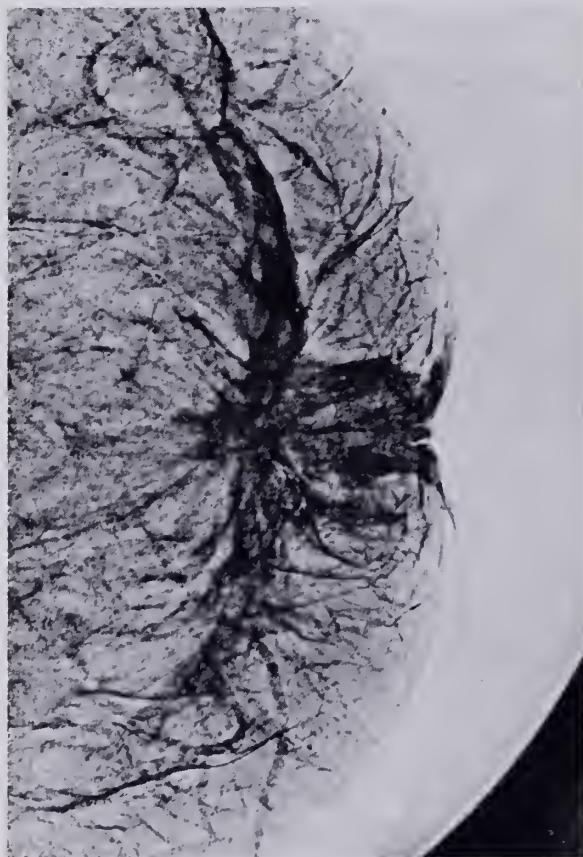


Fig. 7: Advanced breast cancer with both duct and nipple invasion. Note marked nipple retraction.

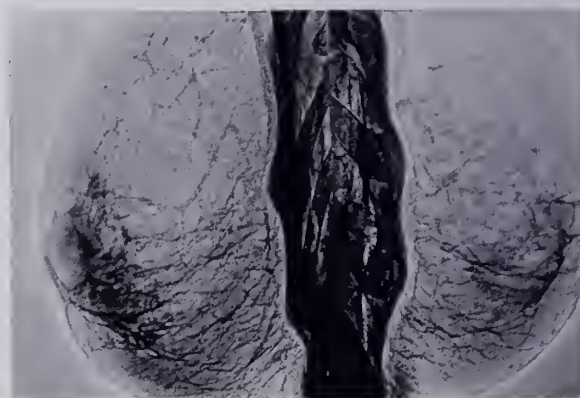


Fig. 6: The atypical duct prominence seen in the breast on the left is indicative of a proliferative response and must be cautiously followed.



Fig. 8: Note similar appearance of biopsy scar (left) and sclerosing adenosis (right) to carcinoma (center).



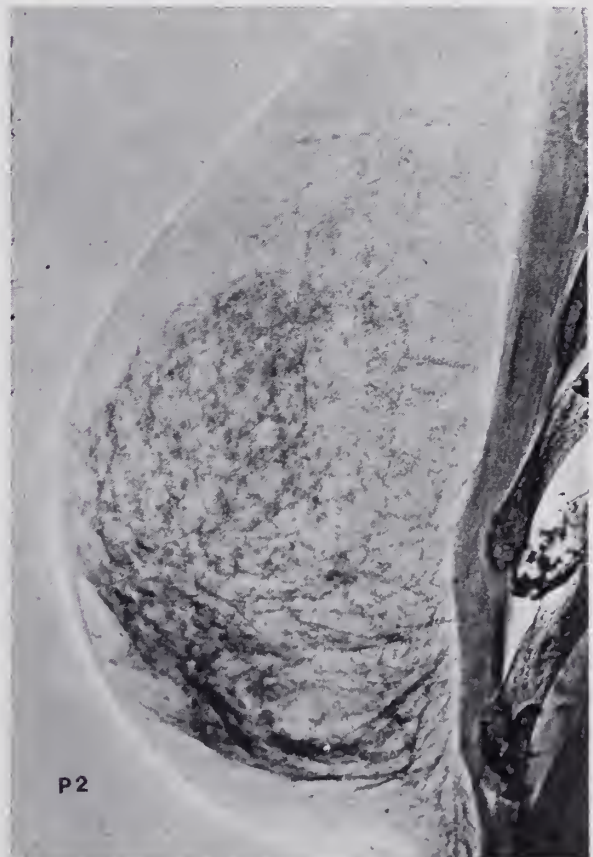
Figs. 9. The parenchymal patterns are categorized according to increasing degrees of duct and lobular proliferation indicative of probable increasing risks. N<sub>1</sub>, P<sub>1</sub>, P<sub>2</sub>, DY and QDY. The QDY classification is the dysplastic breast in a young patient which may change with advancing age. (next page)

### Summary

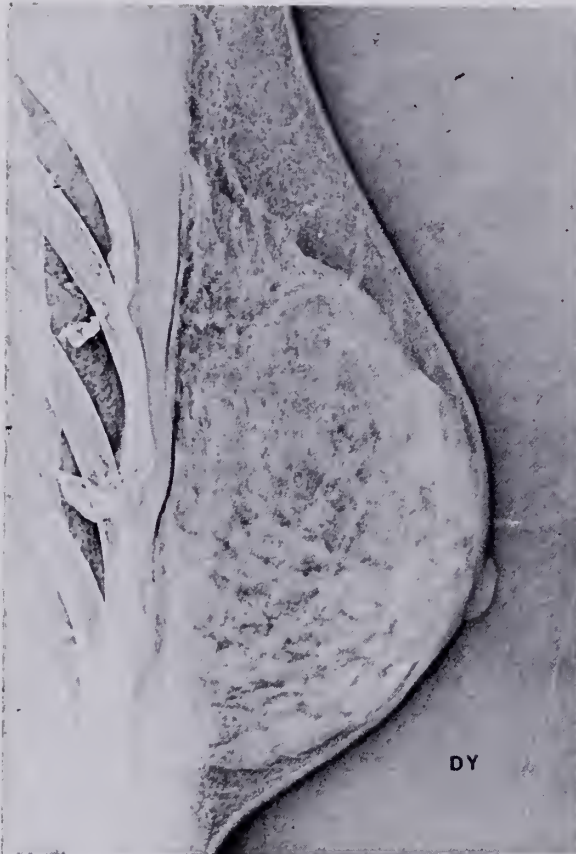
Radiographic imaging of the female breast provides us with a sensitive indicator of early breast cancer. Current reduced dose techniques have for all practical purposes, eliminated the hypothetical risk. The benefit from the proper application of this exam seems substantial. A thorough understanding of both malignant and benign presentations is required to maintain credibility with the referring physicians and advance the use of this important technique.

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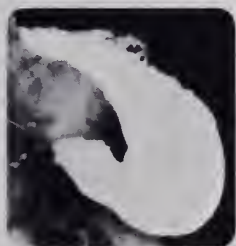
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†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

**Reference:**

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with. Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

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# A Clinical Approach to the Choice of Antimicrobial Usage, Case Number Eight: *Klebsiella pneumoniae pneumonia*

Howard F. Wunderlich, M.D., Martin J. Raff, M.D., and Julio C. Melo, M.D.

Louisville, Kentucky

This is the eighth in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choices of antimicrobial agents and explanations of why the authors choose one as the best agent.

A 56-year-old alcoholic white male with chronic obstructive pulmonary disease presents with a two-day illness characterized by repeated shaking chills, fever and cough with expectoration of thick, mucoid, occasionally blood-tinged sputum. He appears to be in moderate respiratory distress with respirations 36/min., pulse 128/min., temperature 39.2°C and blood pressure 110/70 mm Hg. Pertinent physical findings include splinting of the right thorax and evidence of consolidation of the right upper and possibly the right middle lobes of the lung. Other findings include spider angiomas, palmar erythema, gynecomastia, testicular atrophy and a small, nodular, firm liver barely palpable under the right costal margin.

Laboratory data reveal a leucocytosis of 19,500/mm<sup>3</sup> with 86% neutrophils, 9% bands, and 5% lymphocytes. Chest x-ray shows depressed diaphragms, hyperinflated lungfields and a confluent, well-demarcated dense infiltrate bulging out the minor fissure and filling the entire superior one half of the right lung field. A small right pleural effusion is evident. Gram stain of expectorated sputum shows sheets of polymorphonuclear leucocytes and plump encapsulated gram-negative bacilli. The urinalysis is

normal, as are serum electrolytes. Arterial blood gases reveal a pO<sub>2</sub> 60 mm Hg, pCO<sub>2</sub> 32 mm Hg, and pH 7.42.

Which of the following choices of antibiotics is more appropriate?

- A. Gentamicin (Garamycin®)
- B. A cephalosporin (cephalothin, cefazolin, cefamandole, or cefoxitin)
- C. Ampicillin
- D. A cephalosporin and an aminoglycoside (gentamicin, tobramycin or amikacin)
- E. Penicillin G (Benzyl penicillin)

Answer: D, a cephalosporin and an aminoglycoside in combination, is the most appropriate choice. Although answers A and B may be adequate choices, aminoglycosides and cephalosporins used together provide more thorough initial coverage. The combination has been shown to be antimicrobially synergistic *in vitro* against *Klebsiella pneumoniae*. Although the use of an aminoglycoside such as gentamicin or tobramycin alone cannot be faulted, it is less suitable since these compounds have a low therapeutic index (the therapeutic and toxic levels are very close)<sup>2</sup> and poor tissue penetrability.<sup>3,4</sup> Cephalosporins alone are adequate against sensitive strains of *K. pneumoniae*, but prior to return of sensitivity studies an aminoglycoside should be added since some of isolates of *K. pneumoniae* may be resistant to cephalosporins.<sup>5</sup> In addition, Klastersky has shown bacterial inhibition to occur more rapidly with this synergistic combination than when either cephalosporins or aminoglycosides are used alone.<sup>7</sup> *K. pneumoniae pneumonia* has a mortality rate of 40-60% even when adequately treated, and almost always occurs in a debilitated individual with suppressed host defense mechanisms or other predisposing factors. These most commonly include alcoholism, chronic obstructive pulmonary disease and inhibition of the normal gag reflex.<sup>5</sup> The organism produces a necrotizing pneumonitis that

From the Section of Infectious Diseases, Department of Medicine and the Department of Microbiology and Immunology, University of Louisville School of Medicine, Louisville, Kentucky.



may cavitate and is associated with a 60% incidence of bacteremia.<sup>6</sup> Therefore the severe nature of the pneumonia and the broader antimicrobial coverage provided by the combination of a cephalosporin and an aminoglycoside makes this the initial therapy of choice. Ampicillin, penicillin G and other penicillins are almost uniformly ineffective against *K. pneumoniae*.

The choice of which cephalosporin to employ is a matter of some controversy. Cefazolin may be preferred to cephalothin and cephaloridine because of its lower minimum inhibitory concentration (MIC) against *Klebsiella* species.<sup>8</sup> Moreover, the ability to administer it less frequently due to its prolonged half-life, the higher peak serum levels attainable, its tolerance when given intramuscularly, and superior tissue penetration are factors which favor cefazolin over cephalothin.<sup>8</sup> Cefamandole and cefoxitin, newer second generation cephalosporins with a broader gram-negative spectrum, do not appear to have a clinically significant advantage over other cephalosporins against *K. pneumoniae*, unless one is dealing with strains which may be resistant to cephalothin and cefazolin but sensitive to one of the latter two.

The aminoglycoside of choice is also a matter of debate. Gentamicin and tobramycin have approximately equivalent antimicrobial activity against *K. pneumoniae* with MIC's of 0.25 to 0.5 µg/ml. However, increasing reports of plasmid-mediated aminoglycoside resistance to both gentamicin and tobramycin<sup>9</sup> have caused concern, especially in hospital acquired infections with *K. pneumoniae*. Another aminoglycoside, amikacin, has the advantage of being significantly less susceptible to bacterial resistance due to enzyme mediated alteration of the molecule.<sup>10</sup> In hospitals where there is known multi-resistant *K. pneumoniae* to both cephalosporins and gentamicin or tobramycin, amikacin must be used as part of the initial antimicrobial regimen in the treatment of suspected gram negative pneumonias or sepsis. Another factor in the use of aminoglycosides is the question of toxicity. It appears that tobramycin may be less ototoxic and less nephrotoxic than gentamicin or amikacin, based on animal studies and preliminary human data.<sup>11</sup> Nephrotoxicity can be associated with increased renal cortical accumulation of the particular aminoglycoside employed and occurs in 2-10% of patients.<sup>2</sup> It is dose related, occurs

more commonly in the elderly and debilitated, in those with preexisting renal dysfunction, and in those with contracted intravascular volumes.<sup>2</sup> Patients with serious gram-negative infections requiring prolonged aminoglycoside therapy or patients with underlying renal disease should have serum aminoglycoside levels drawn at peak and trough periods in order to assure that adequate therapeutic and nontoxic serum levels are maintained.

Some controversy exists over the possibility of enhancing nephrotoxicity when combinations of cephalosporins and aminoglycosides are used. There have been data suggesting that cephalosporins may either protect against<sup>12</sup> or potentiate the nephrotoxic effects of aminoglycosides.<sup>13</sup> Recently, the Boston Collaborative Drug Surveillance Program has reported that there appears to be no increase in nephrotoxicity with the combination of a cephalosporin and an aminoglycoside over what is seen with the aminoglycoside alone.<sup>14</sup>

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# Report From KMA Cancer Committee—

## Three Mile Island And Medical Radiation Risk And Benefit Considerations

The public is now well aware about the recent nuclear accident at the Three Mile Island Nuclear Reactor. The near disaster and the movie "China Syndrome" have focused our attention on the effects and especially the delayed hazards of radiation in our environment. Of all the sources of environmental radiation, i.e. cosmic and atmospheric radiation, natural radioactive background materials in granite and brick, atomic bomb fallout, none approaches medical-dental x-rays in extent of deliberately applied radiation to man. In such use, risk-benefit considerations should be a foremost consideration particularly in studies where elective studies are being carried out on infants, the pregnant, the young female, the survey study, etc. We need to continually ask ourselves whether the study being performed is truly important in the management and care of the patient being evaluated or treated.

There are many techniques in which radiation has been used that are now considered dangerous. Thymic irradiation for *status thymolymphaticus* is now no longer done. But we have many cases of thyroid disorders which must be watched at the present time and may develop adenomas or cancers in years to come. Spinal irradiation for arthritis is established to increase the risk for leukemia. Breast irradiation for mastitis or mammography of young patients with poorly monitored mammography X-ray machines have led to exposures of several hundred rem (rad equivalent man) doses repeatedly at biannual frequency in the all too recent past. All of these are now regarded as potentially leading to later cancer development. Breast cancer is known to develop after the breast is exposed to breast x-rays or chest fluoroscopy, especially in young females. Hematological malignancies were also more common in older radiologists particularly those who exercised less care during fre-

quent fluoroscopic examinations. Happily, treatment of benign condition such as ringworm of the scalp, acne, enlarged tonsils, and routine diagnostic x-rays of the prenatal female are no longer done. But unnecessary diagnostic radiography still constitutes an all too frequent practice using poorly run machines by unlicensed and untrained personnel. And fear of malpractice suits may be often the only indications for diagnostic studies.

Questions surrounding the late hazards of irradiation are so complex and debated that the central issues still remain unanswered. Although debate alone cannot resolve these issues, potential cancer or leukemias induction and genetic abnormalities are all feared and accepted as real late effects of radiation exposures. And the debate will ask how much can radiation dose in man be reduced and how often can unnecessary exposures be eliminated. We in the medical profession need to be alert to these issues and to be able to answer the question. Do the potential risks of this radiological study and the potential hazards of radiation exposure warrant the benefits one expects to obtain? Moreover, the identification of inadequate and poorly trained personnel, faulty equipment and infrequent monitoring as the reason for excessive medical patient exposures should not be condoned. We must recognize that after the concern about nuclear reactor radiation exposure becomes less acute and begins to subside, the unnecessary medical exposure issue will surely arise again as well as standards of medical training, quality of equipment used, personnel background, and dose surveillance procedures and records. And the fear of radiation-induced cancer will have the public asking us for accountability. We must be prepared for that day by continually reassessing our own use and applications of medical radiation procedures.

---

*This article was written by Y. Maruyama, M.D., Department of Radiation Medicine, University of Kentucky Medical Center and L.C. Wilson, B.S., University of Kentucky Radiological Safety Office.*



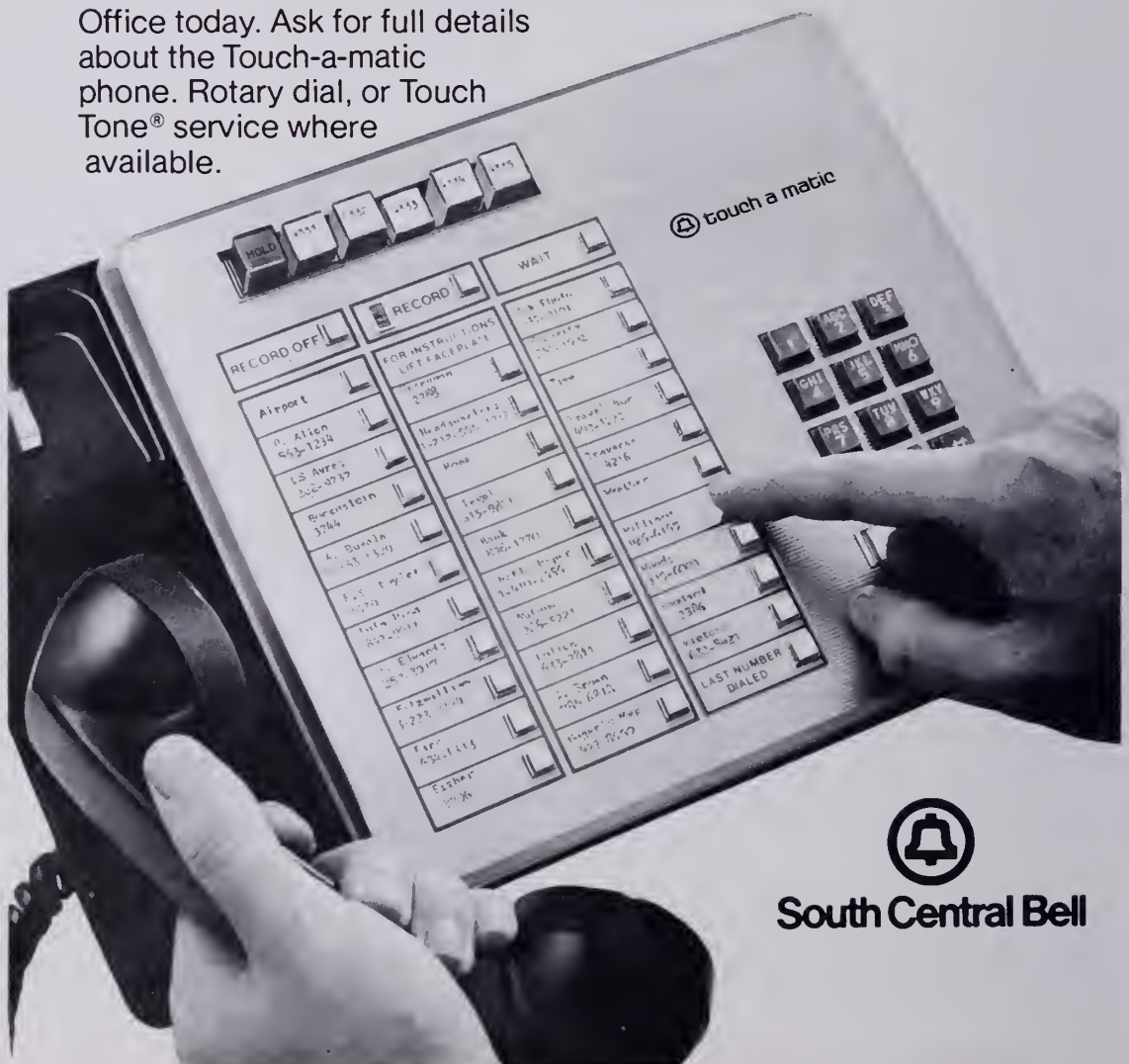
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## EDITORIAL

### Serious And Other Thoughts On The Process Politic

**M**ANY physicians consider the term "crooked-politician" redundant.

This explains in part why the medical community and individual practitioner until recently have shunned participation in the political process. Certainly the demagogue and unscrupulous politician have alienated physicians. But for each pariah there exists another whose positive contributions are little publicized and often overlooked. The limelight of the media with its accentuation of importunities in public office, combined with the lack of newsworthiness of competent elected officials, is largely responsible. We tend to forget that Jefferson, Washington, Adams, Lincoln, Wilson and a host of others were "politicians" and in some cases, revolutionaries.

Since the time of Hippocrates, medicine as an art and science has taken an almost indescribable, quantum leap forward. If similar or parallel innovations had occurred in the political and social sciences since Aristotle's *Treatise on Politics*, we should be living in virtual Utopia today.

This lack of progress generates a sense of frustration. We are disappointed in and distrustful of the qualifications and ability of those attracted to elected office. Greed and a desire for power to further personal ambition seem commonplace. Why then wonder that physicians are reluctant to be active in political affairs? Yet, do physicians actually not participate in politics?

The policy of any organization, the YMCA, the Congress, the Boy Scouts, can be defined as "a principle or plan . . . which determines specific action." Politics can be further defined as "the process by which the policy of any organization or group is determined." In essence each one of us who is active in a social organization, church, fraternal group, hospital staff, professional society, club, etc., etc. . . . is a component in determining its policy—or in other words, engaged in politics. Why abstain from having a voice in the policy that shapes the future of our society? You have an opportunity between now and November or will you leave it to chance?

*"The history of free men is never written by chance, but by choice—their choice."*—DWIGHT D. EISENHOWER.

*What's good politics is bad economics; what's bad politics is good economics; what's good economics is bad politics; what's bad economics is good politics.*—EUGENE BAER

*Brontosaurus Principle—Organizations can grow faster than their brains can manage them in relation to their environment and to their own physiology: when this occurs, they are an endangered species.*—T. K. CONNELLAN

*Anyone who says he isn't going to resign, four times, definitely will.*—JOHN KENNETH GALBRAITH.

*The basis of our political system is the right of the people to make and to alter their constitutions of government.*—GEORGE WASHINGTON

*Politics is the art of human happiness.*—H. A. L. FISHER

*Cohen's Law of Attraction—Power attracts people but it cannot hold them. Cohen's Law of Wealth—Victory goes to the candidate with the most accumulated or contributed wealth who has the financial sources to convince the middle class and poor that he will be on their side.* MARK B. COHEN

*The price of any product produced for a government agency will be not less than the square of the initial Firm Fixed-Price Contract.*—RAY CONNOLLY

*Democracy is that form of government where everybody gets what the majority deserves.*—JAMES DALE DAVIDSON

*When a man assumes a public trust, he should consider himself as public property.*—THOMAS JEFFERSON

*True it is that politics makes strange bedfellows.*—CHARLES DUDLEY WARNER

*"You tell me whar a man gits his corn pone, en I'll tell you what his 'pinions is'."*—MARK TWAIN

*Knowledge of human nature is the beginning and the end of political education.*—HENRY ADAMS

*Politics has got so expensive that it takes lots of money to even get beat with.*—WILL ROGERS

*Conscience has no more to do with gallantry than it has with politics.*—RICHARD SHERIDAN



*I hold it, that a little rebellion, now and then, is a good thing, and as necessary in the political world as storms in the physical.*—THOMAS JEFFERSON

*If you can't convince them, confuse them.*—HARRY S TRUMAN

*Torquemada's Law—When you are sure you're right, you have a moral duty to impose your will upon anyone who disagrees with you.*

*More important than winning the election, is governing . . . That is the test of a political party—the acid, final test.*—ADLAI STEVENSON

*Congressional Record—Author Anonymous—Democrats give their worn out clothes to those less fortunate. Republicans wear theirs. Democrats name their children after currently popular sports figures, politicians and entertainers. Republican children are named after their parents or grandparents, according to where the money is. Democrats eat the fish they catch. Republicans hang them on the wall.*

*Political institutions are a superstructure resting on an economic foundation.*—NIKOLAI LENIN

*Government expands to absorb revenue—and then some.*—TOM WICKER

*The press is hopelessly biased or genuinely fair, depending upon whose views are being misquoted, misrepresented, or misunderstood.*—GOV. PIERRE S. DU PONT

*Politicians' Rules—(1) When the polls are in your favor, flaunt them. (2) When the polls are overwhelmingly unfavorable, (a) ridicule and dismiss them or (b) stress the volatility of public opinion. (3) When the polls are slightly unfavorable, play for sympathy as a struggling underdog. (4) When too close to call, be surprised at your own strength.*

*The basis of our government being the opinion of the people, the very first object should be to keep that right.*—THOMAS JEFFERSON

*Dirksen's Three Laws of Politics—1. Get elected. 2. Get reelected. 3. Don't get mad, get even.*

*Jacquin's Postulate on Democratic Governments—No man's life, liberty or property are safe while the legislature is in session.*

*People have always been and they always will be stupid victims of deceit and self-deception in politics . . .*—NIKOLAI LENIN

*The more zeros found in the price tag for a government, the less Congressional scrutiny it will receive.*—MARCUS RASKIN

*The more campaigning, the better.*—LARRY O'BRIEN

*You in America should trust to that volcanic political instinct which I have divined in you.*—GEORGE BERNARD SHAW

*Fowler's Law—In a bureaucracy accomplishment is inversely proportionate to the volume of paper used.*—FOSTER L. FOWLER

*Political campaigns are designedly made into emotional orgies which endeavor to distract attention from the real issues involved, and they actually paralyze what slight powers of cerebration man can normally muster.*—JAMES HARVEY ROBINSON

*It's easier to be a liberal a long way from home.*—DON PRICE

*Whenever the cause of the people is entrusted to professors it is lost.*—NIKOLAI LENIN

*Let us hope, that . . . we shall secure an individual, social, and political prosperity and happiness, whose course shall be onward and upward, and which, while the earth endures, shall not pass away.*—ABRAHAM LINCOLN

JPM

## Notice To Contributors

Members of the Kentucky Medical Association reading papers before other organizations are asked to submit their papers to *The Journal* for consideration by the Editors for publication. Detailed instructions to contributors appear in the Scientific Section of *The Journal* under Manuscript Memos. Please forward any papers to:

Paul C. Grider, Jr., M.D., Scientific Editor  
The Journal of the Kentucky Medical Association  
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Ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

**CONTRAINDICATIONS:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components. Do not use in the eyes or in the external ear canal if the eardrum is perforated.

**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control

secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

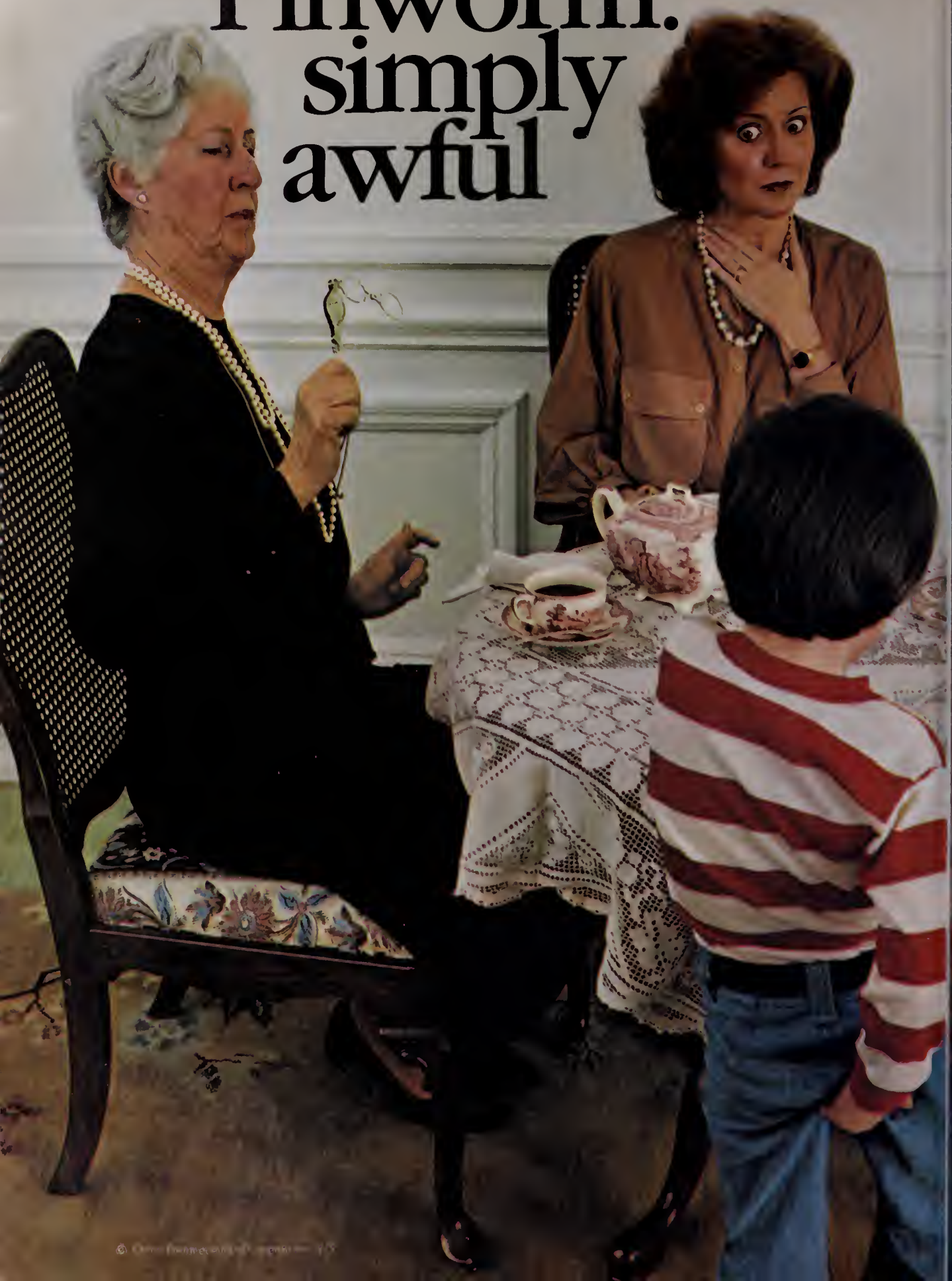
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Each gram contains: Aerosporin<sup>®</sup> (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base), special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

**INDICATIONS:** *Therapeutically*, (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as infected burns, skin grafts, surgical incisions, otitis externa; primary pyodermas (impetigo, ecthyma, eczema, cosis vulgaris, paronychia); secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis); traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the



# Pinworm: simply awful



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**one dose** single VERMOX 100 mg tablet is the treatment for pinworm in both adults and children\* of all body weights; no dosage calculations or confusion

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## Vermox<sup>®</sup> chewable tablets (mebendazole)

**Description** VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

**Actions** VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival.

In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 µg/ml and 0.09 µg/ml, respectively.

**Indications** VERMOX is indicated for the treatment of trichuriasis (*Trichuris trichiura* (whipworm)), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies in function of such factors as pre-existing

diarrhea and gastrointestinal transit time, degree of infection and helminth strains.

**Contraindications** VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

**Precautions** **PREGNANCY:** VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

**PEDIATRIC USE:** The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

**Adverse reactions** Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

**Dosage and administration** The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food.

For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.

For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.

If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

**How supplied** VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.

VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.



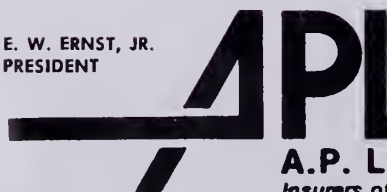
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## EDITORIALS



### How Can They Do That To Us?

**F**ROM doctor's lounges to charting desks to hospital corridors, the question is always the same after any change in the status quo under which we practice. We hear it about Medicare, Medicaid, P.S.R.O., about continuing education and about National Health Insurance. "They" always seem to be out to get "us".

In recent years and in coming years one fact is obvious, change will occur. The major question remains, what part will you have, what part will all of us have in determining the direction of that change?

The best opportunity for us to be effective in directing change is to speak through organized medicine and to work to be sure that organized medicine reflects the views of the individual practicing physician. This procedure is neither impossible nor automatic. It requires some effort on the part of the individual physician to be sure that his voice is heard. The best opportunity for Kentucky physicians is approaching in September. The Annual Meeting of the Kentucky Medical Association (KMA) will be held September 25-September 27, 1979, in Louisville. The House of Delegates, the official policy-making body of our Organization will meet on Monday, September 24 and Wednesday, September 26. The time to plan to be heard is now.

Four specific steps will enable you to become effective in setting policy for the KMA.

- 1) Identify your delegate.
- 2) Talk to your delegate and trustee.
- 3) Come to the Convention yourself.
- 4) Get a report from your delegate after the Convention.

Identification of your delegate should be a simple task. The Secretary of your county society or the KMA office can help you determine this. Once you have found the delegate, ask him what issues are expected for this convention. Each delegate receives a packet containing committee reports and resolutions before the

convention begins. It is possible by studying this packet to learn what business has transpired in the past year from the reports of the Board of Trustees and of the various committees. All of these actions are subject to approval or rejection by the House in September. Tell your delegate what position you support. Let your delegate know what other items you think should come to the attention of the KMA. Repeat all of these steps with the trustee from your district.

When you attend the convention you have the best opportunity to be effective in a personal way. Every member may attend and speak at Reference Committee meetings on Monday. Various topics are assigned to the several committees and with a little planning you can manage to be heard on many subjects in one afternoon. Most Reference Committee chairmen will be able to alter the agenda to hear speakers who make their desires known to the chairman in advance. KMA staff members wear white ribbons, KMA officers wear red ribbons and any of them are at the meeting to help you find the right place to have your say. Talk to your own delegate at the Convention and talk to delegates of other Societies. Delegates wear blue ribbons. Let them know your feelings. Let them help your ideas be heard if you need to be in two Reference Committee meetings at one time. Attend the final meeting of the House of Delegates on Wednesday evening. A great deal about the political process involved in decision making can be learned at that session. You may not see all your ideas become organization policy, but a few will make it and for the rest, you may understand better the additional steps required.

It's a lot of work and it's time consuming to follow these steps, but "the price of liberty is eternal vigilance." These are the time tested ways to be sure that "they" don't do it to "us". If you don't want them to do it, you must do it yourself.

THOMAS L. HEAVERN, JR., M.D.



# The Make

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.



*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were**

not bioequivalent to reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record of drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may provide minimum quality assurance.

*MYTH: Industry favors only "expensive" brand names and denigrates generics.*

**FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.**

# Matters.

*MYTH: Generic options almost always exist.*

**FACT:** About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

---

*MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.*

**FACT:** Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT:** Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

---

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT:** Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

## The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

## The maker does matter

After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.



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**Description:** V-Cillin K is the potassium salt of penicillin V. This chemically improved form combines acid stability with immediate solubility and rapid absorption.

**Indications:** For the treatment of mild to moderately severe pneumococcal respiratory tract infections and mild staphylococcal skin and soft-tissue infections that are sensitive to penicillin G. See the package literature for other indications.

**Contraindication:** Previous hypersensitivity to penicillin.

**Warnings:** Serious, occasionally fatal, anaphylactoid reactions have been reported. Some patients with penicillin hypersensitivity have had severe reactions to a cephalosporin; inquire about penicillin, cephalosporin, or other allergies

before treatment. If an allergic reaction occurs, discontinue the drug and treat with the usual agents (e.g., epinephrine or other pressor amines, antihistamines, or corticosteroids).

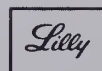
**Precautions:** Use with caution in individuals with histories of significant allergies and/or asthma. Do not rely on oral administration in patients with severe illness, nausea, vomiting, gastric dilatation, cardiopasm, or intestinal hypermotility. Occasional patients will not absorb therapeutic amounts given orally. In streptococcal infections, treat until the organism is eliminated (minimum of ten days). With prolonged use, nonsusceptible organisms, including fungi, may overgrow; treat superinfection appropriately.

**Adverse Reactions:** Hypersensitivity, including fatal anaphylaxis. Nausea, vomiting, epigastric distress, diarrhea, and black, hairy tongue. Skin eruptions, urticaria, reactions resembling serum sickness (including chills, edema, arthralgia, prostration), laryngeal edema, fever, and eosinophilia. Infrequent hemolytic anemia, leukopenia, thrombocytopenia, neuropathy, and nephropathy, usually with high doses of parenteral penicillin.

(102175)

\*Equivalent to penicillin V.

Additional information available to the profession on request.



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# Letters to the Editor

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of *The Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

## To the Editor:

The role of the radiologic technologist is becoming an increasingly important position in many of the Breast Cancer Screening Projects throughout the nation. For the past six years, the Louisville Breast Cancer Demonstration Project has screened a large population of women in an attempt to detect early breast cancer. During this time, these women have been informed of the dangers and early warning signs of breast disease and, in general, have become more aware of their own breasts. Physicians, nurses, radiologic technologists and American Cancer Society volunteers have worked together to teach these women to become more familiar with and to recognize obvious, as well as subtle, changes in their breasts.

Mammography remains the most sensitive indicator of breast disease and the expertise of the radiologic technologist is, indeed, significant. The Breast Cancer Demonstration Project technologists are adept at pre-screening procedures and quality control. They learn to recognize pathological warning signs such as increased densities in the breast, ductal and tissue asymmetry, various types of mammary masses and tumor calcifications. This knowledge allows the technologist to obtain additional views at the time of the patient's current visit as opposed to the radiologist having to render a preliminary report pending additional views upon a return visit by the patient. This also eliminates the need for direct supervision by the radiologist during patient examinations. In addition, the patient seems to feel more at ease with a competent technologist who is able to answer questions concerning the examination. In the current climate, patients either ask or demand certain information concerning the x-ray procedure. This is not only true in mammography but in other areas of diagnostic radiology. The patients deserve both a prompt and accurate answer in regard to radiation dosage and examination frequency. The mammography technologist should be able to reflect the feelings and opinions of the radiologist in an accurate and professional manner.

Optimal film quality is essential to the mammographer. There is a very narrow exposure latitude to this radiologic examination and this as well as improper positioning can render a mammogram useless. Only when these factors are perfectly executed can the images supply the accurate and significant diagnostic information.

The mammography technologist thus gains a working knowledge of medical procedures including surgical and pathological follow up. This type of correlation provides a continuing force of education. The radiologic technologist is at the center of these activities, thus involving them in the vast field of cancer research.

With the continuing emphasis on the expertise of para-professionals, this area in the field of radiology demonstrates that radiologic technologists can occupy these interesting and responsible positions thereby augmenting the entire medical profession.

Kate Pearce, R.T.  
Staff Radiologic Technologist  
University of Louisville  
Breast Cancer Detection  
Demonstration Project

## To the Editor:

Diabetes mellitus and its complications have not been recognized as a major cause of morbidity, mortality or economic loss in Kentucky. Diabetes has been listed as the 6th leading cause of death by the Department of Human Resources, and its prevalence has been set at 150,000 active cases.<sup>1</sup> No dollar figure has been proposed to describe the direct costs of diabetes; however its low priority in health care planning is documented by its omission from the list of the 20 leading health problems in Kentucky for 1978 by the Eastern Kentucky Health Systems Agency<sup>2</sup> and by the few Kentucky Hospitals certified to have diabetes patient education programs by the American Association of Diabetes Educators.<sup>3</sup>

Recent, but preliminary data from a new diabetes program at the University of Kentucky (The Kentucky Diabetes Program) and from the Governor's Special Study Commission on Diabetes suggest that diabetes is a more serious health problem than previously supposed. Surveys now suggest that there are 205,000 active cases of diabetes in Kentucky, that diabetes alone is the 4th leading cause of death, that diabetes and related metabolic disorders may be the 2nd leading cause of death, and that diabetes costs Kentucky over \$200,000,000/annum.<sup>4</sup> Hospitalized diabetics stay longer in the hospital and each hospital stay costs more than nondiabetics.<sup>4</sup> Consistent with its prevalence in the population diabetes, accounts for approximately 6% of all hospital admissions. These admissions are unequally distributed among hospital services. At the University of Kentucky Medical Center, only 2.3% of pediatric admissions are diabetics, but over 16% of admissions to internal medicine involve diabetes.<sup>4</sup> The average hospital stay for nondiabetics costs \$911, but it is \$1248 for diabetes as the primary reason for admission, and may exceed \$15,000 for amputation of a foot from a diabetic patient.

Resource allocation for diabetes in Kentucky is clearly inadequate, when considered with these data. For example, at the University of Kentucky, the majority of diabetic cases is seen on internal medicine, but only pediatrics has appointed allied health personnel to assist in diabetes care on a full-time basis. At the state government level, diabetes care receives only \$52,000/



annum in budgetary allocation.<sup>1</sup> Few community hospitals have an institutional program designed for diabetes care and, until recently, neither state university maintained such a program.

TABLE 1  
HEALTH PROFESSIONALS IN  
THE KENTUCKY DIABETES PROGRAM

physician  
teaching nurse  
teaching nutritionist  
podiatric care personnel  
physical therapists  
social worker for patient counselling

The 1976 report of the National Diabetes Commission identified three components of diabetes care: competent physician care; adequate ancillary services, and as podiatric services; and programs to teach patients self-care.<sup>5</sup> Studies in other states have documented that programs which teach patients proper self-care not only decrease morbidity and mortality, but also result in economic savings for patient and hospital alike.<sup>6,7</sup> This is despite the heavy personnel requirements of such programs, and despite the lengthy time commitment that must be made to the proper service of each patient.

The design of the Diabetes Program at the University of Kentucky reflects these determinants. The new program at the University Medical Center requires a number of different health personnel (Table 1) and an estimated four hours of initial contact with a new patient. Nevertheless, the Program, which has been only partly operational during the last 12 months, has already resulted in an economic savings of approximately \$100,000/annum. This savings is comparable to reports from other institutions.<sup>7</sup> Hopefully, this program will be the template for the proliferation of such care programs for diabetes throughout the Commonwealth of Kentucky.

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- Steven B. Leichter, M.D.  
Peggy H. Collins, B.S.  
Susan Ferguson, M.S.  
Anne Rhodes, R.N.  
The Diabetes Program  
University of Kentucky Medical Center

**Tenuate®**  
(diethylpropion hydrochloride NF)

**Tenuate Dospan®**  
(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

#### Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. **Drug Dependence:** Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression, changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. **Use in Pregnancy:** Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. **Use in Children:** Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** **Cardiovascular:** Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. **Central Nervous System:** Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. **Gastrointestinal:** Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. **Allergic:** Urticaria, rash, ecchymosis, erythema. **Endocrine:** Impotence, changes in libido, gynecomastia, menstrual upset. **Hematopoietic System:** Bone marrow depression, agranulocytosis, leukopenia. **Miscellaneous:** A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.  
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:  
MERRELL-NATIONAL LABORATORIES  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215, U.S.A.

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References: 1. Citations available on request—Medical Research Department, MERRELL RESEARCH CENTER, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon, R.H., and Leyland, H.M.: A Comprehensive Review of Diethylpropion Hydrochloride. International Symposium on Central Mechanisms of Anorectic Drugs, Florence, Italy, Jan. 20-21, 1977.

**Merrell**

8-3921 (1587A1)

**Overweight may not always be simple...  
complications can develop\*.  
Complicated or not...**

# **Tenuate<sup>®</sup> Dospan<sup>®</sup> <sup>IV</sup>** **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

## **A useful short-term adjunct in an indicated weight loss program.**

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

## **In uncomplicated overweight.**

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

## **Clinical effectiveness.**

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.<sup>1</sup> And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."<sup>2</sup> Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.  
And it's responsible medicine.**

\*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

# **Merrell**



For prescribing information see opposite page



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Now there are three  
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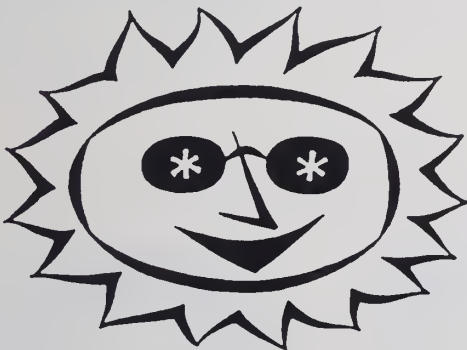
April 1

# 1979 Annual Meeting Section

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# *KMA Officers*

*1978-1979*



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**PRESIDENT**



**Robert S. Howell**  
**President-Elect**



**Harold L. Bushey, M.D.**  
**Vice-President**



**S. Randolph Scheen, M.D.**  
**Secretary-Treasurer**



**Bennett L. Cowder, II, M.D.**  
**Speaker of the House**



**Peter C. Campbell, Jr., M.D.**  
**Vice-Speaker of the House**

**PRESIDENT-ELECT**  
**Robert S. Howell, M.D.**  
**Louisville**

Robert S. Howell, M.D., will be installed as President of the Kentucky Medical Association at the President's Luncheon on Wednesday, September 26.

A pathologist, Doctor Howell received his medical degree in 1952 from the University of Louisville School of Medicine where he is now Clinical Assistant Professor of Pathology. He is also Director of Laboratories at Jewish Hospital.

Doctor Howell has served as Past President of the Jefferson County Medical Society and Vice-President of KMA. He is a Fellow in the College of American Pathologists and the American Society of Clinical Pathologists.

Doctor Howell, was 1974 President of the Kidney Foundation of Kentucky, and is active in the Chamber of Commerce.

---

**VICE-PRESIDENT**

**Harold L. Bushey, M.D., Barbourville**

Doctor Bushey has served as a Trustee for the Kentucky Medical Association from 1972 to 1978. An internist, he was also an alternate Trustee for four years and a Delegate to the KMA for six years. Doctor Bushey is a member of the American Medical Association and the Knox County Medical Society. He is active in numerous civic organizations including the Knox County Chamber of Commerce and the Cumberland Valley Comprehensive Health Planning Council. Doctor Bushey is a 1954 graduate of the University of Rochester Medical School.

**SPEAKER OF THE HOUSE**

**Bennett L. Crowder, II, M.D., Hopkinsville**

Doctor Crowder served an unexpired term of one year as Vice-Speaker, and also serves as Parliamentarian for the Association. A general and thoracic surgeon, he is a 1961 graduate of the University of Tennessee. A Fellow in the American College of Surgeons, Doctor Crowder also sits on the Constitution and Bylaws Committee of KMA and is a former Secretary of the KEMPAC Board. He is active in numerous civic organizations, including the Jaycees, Rotary Club, and the Chamber of Commerce.

**SECRETARY-TREASURER**

**S. Randolph Scheen, M.D., Louisville**

Doctor Scheen was KMA Secretary for eight years prior to his election as Secretary-Treasurer in 1975. A dermatologist, he is a graduate of the University of Louisville and University of Minnesota medical schools. Doctor Scheen serves the Association as a member of the Budget Committee and Judicial Council. He is a member of the American Academy of Dermatology and the Alumni Foundation of the Mayo Clinic, and is a regular participant on local television and radio programs, answering questions from the public on dermatology.

**VICE-SPEAKER OF THE HOUSE**

**Peter C. Campbell, Jr., M.D., Louisville**

An ophthalmologist, Doctor Campbell is Clinical Professor of Ophthalmology at the University of Louisville School of Medicine. He is a member of the American Academy of Ophthalmology and Otolaryngology, the Kentucky Academy of Eye Physicians and Surgeons, and is President of the medical staff at Methodist Evangelical Hospital in Louisville. Doctor Campbell is a 1961 graduate of the University of Louisville School of Medicine.



## AMA Delegates

### David B. Stevens, M.D., Lexington

Doctor Stevens is the Senior Delegate to the AMA from Kentucky, having served since 1965 as Delegate or Alternate Delegate. An orthopedic surgeon, Doctor Stevens is a Past President of the Fayette County Medical Society, and served eight years on the KMA Committee on Legislative Activities. A 1955 graduate of Northwestern University, Doctor Stevens is Assistant Clinical Professor of Surgery at the University of Kentucky.



### Fred C. Rainey, M.D., Elizabethtown

Doctor Rainey was elected an AMA Delegate in 1974, having previously served as President of KMA, Alternate AMA Delegate, and Board Chairman of KEMPAC. A 1955 graduate of the University of Tennessee College of Medicine, Doctor Rainey is a family physician. He is a member of the AMA Council on Legislation, the American Medical Political Action Committee, the Kentucky Academy of Family Physicians, and the American Academy of Family Physicians.



### Harold D. Haller, Sr., M.D., Louisville

Elected an AMA Delegate in 1976, Doctor Haller has been active on the Committee on Maternal and Child Health and the Committee on Health Care Costs. Doctor Haller graduated in 1963 from Bowman Gray Medical School, and has been in family practice since then. A charter member of the American Board of Family Practice, Doctor Haller also has served as President of the Kentucky Chapter of the American Academy of Family Physicians.



## New Trustees

### Walter S. Coe, M.D., Louisville

Doctor Coe now serves as the Fifth District Trustee. A cardiologist, he is a 1943 graduate of the University of Louisville School of Medicine, former Editor of the Journal of KMA and was President of the Jefferson County Medical Society from 1970 to 1971.

### Donald C. Barton, M.D., Corbin

Doctor Barton is serving as Trustee from the Fifteenth District. A family physician, Doctor Barton was Chairman of KEMPAC for two years and a board member for six years. He is a 1960 graduate of the University of Louisville School of Medicine.

### Richard F. Hench, M.D., Lexington

Doctor Hench is serving as Trustee from the Tenth District. An internist in Lexington for 15 years, Doctor Hench is a 1956 graduate of Temple University School of Medicine in Philadelphia. He has served as past scientific program chairman of KMA and was an alternate Trustee for three years.

## Journal Editors

### EDITOR

### A. Evan Overstreet, M.D., Louisville

Doctor Overstreet had served on the Editorial Board for more than six years before becoming Editor of *The Journal* in September 1977. An internist, Doctor Overstreet is a 1955 graduate of the University of Louisville School of Medicine. He is a member of the American Society of Internal Medicine, the American College of Physicians, and the Transylvania Medical Society.

### Paul C. Grider, Jr., M.D., Louisville

Doctor Grider has served as Scientific Editor for *The Journal* since 1975. An internist, Doctor Grider was President of the Louisville Society of Internists from 1976 to 1977 and also former President of the medical staff at Methodist Evangelical Hospital. Doctor Grider is a 1958 graduate of the University of Louisville School of Medicine.

### Milton F. Miller, M.D., Louisville

Doctor Miller is Associate Clinical Professor of Medicine at the University of Louisville School of Medicine. An internist, Doctor Miller has served as Assistant Editor of *The Journal* since 1976, and has been on the Membership Committee of the Jefferson County Medical Society. He is a 1954 graduate of the University of Louisville.

**James P. Moss, M.D., Louisville**

Doctor Moss is serving his second year as Assistant Editor of *The Journal*. He is a surgeon and Assistant Clinical Professor in the Department of Surgery at the University of Louisville School of Medicine. A diplomate of the American Board of Surgery, Doctor Moss is active in the Jefferson County Medical Society and KMA. He graduated from the University of Louisville School of Medicine in 1966.

**G. Randolph Schrodt, M.D., Louisville**

Doctor Schrodt has served as Assistant Editor since 1974. A 1954 graduate of the University of Louisville School of Medicine, Doctor Schrodt is a pathologist, and is Professor and Chairman of the Department of Pathology at the University of Louisville School of Medicine. He is a member of the American Society of Clinical Pathologists and the International Academy of Pathology.

**Stephen Z. Smith, M.D., Louisville**

Doctor Smith has served as Assistant Scientific Editor for *The Journal* since 1977. A dermatologist, Doctor Smith is a 1971 graduate of Johns Hopkins University School of Medicine. He is a member of the American Academy of Dermatology, the Kentucky Medical Association and the American Medical Association.

**David L. Stewart, M.D., Louisville**

Doctor Stewart, a former Editor of the Jefferson County Medical Society Bulletin, is in his third year as Assistant Editor of *The Journal*. A psychiatrist, Doctor Stewart graduated from the University of Louisville in 1946, is a member of the American Psychiatrist Association, and is Chairman of the KMA Committee on Physician's Health.

**Other Editorial Positions**

**Regional Editors—Appointed in 1977**

Allen E. Grimes, Jr., M.D., Lexington

William W. Hall, M.D., Owensboro

Thomas L. Heavern, Jr., M.D., Highland Heights

**OFFICIAL CALL**

**KMA Annual Meeting**

To the officers and members of the component county medical societies of the Kentucky Medical Association.

**Meeting Place**

The Annual Meeting of KMA will convene on Tuesday, Wednesday, and Thursday, September 25, 26, and 27, at the Ramada Inn/Bluegrass Convention Center, Louisville. The first general session will be called to order at 8:30 a.m., Tuesday.

**The House of Delegates**

The first regular session of the House of Delegates will convene at 9 a.m., Monday, September 24, in the Julia Belle room of the Ramada Inn/Bluegrass Convention Center. The second regular business session will begin at 6 p.m., Wednesday, September 26, in the Julia Belle Room of the Ramada Inn/Bluegrass Convention Center.

**Registration**

The registration desk will open for Delegates in the Bluegrass Convention Center lobby at 8 a.m., Monday, September 24 and at 5 p.m. Wednesday, September 26. General registration will also be held in the lobby of the Convention Center from 8 a.m. to 5 p.m., Tuesday and Wednesday, and 8 a.m. to 3:30 p.m. on Thursday.

**Number To Use For Messages  
is 502-491-1929**

A Message Center will be set up during the 1979 KMA Annual Meeting. The telephone number where you may be reached is 491-1929. This is a central hotel number through which all messages will be routed.

Staffed at all times during the meeting, the Message Center will be located inside the lobby of the Bluegrass Convention Center. Paging of individual physicians is not possible due to the arrangement of facilities for the meeting.

Only emergency calls will be posted on blackboards in the lobby of the Convention Center. All other messages will be kept on file at the Message Center until they are called for. It is requested that physicians check at the Message Center often for any messages.

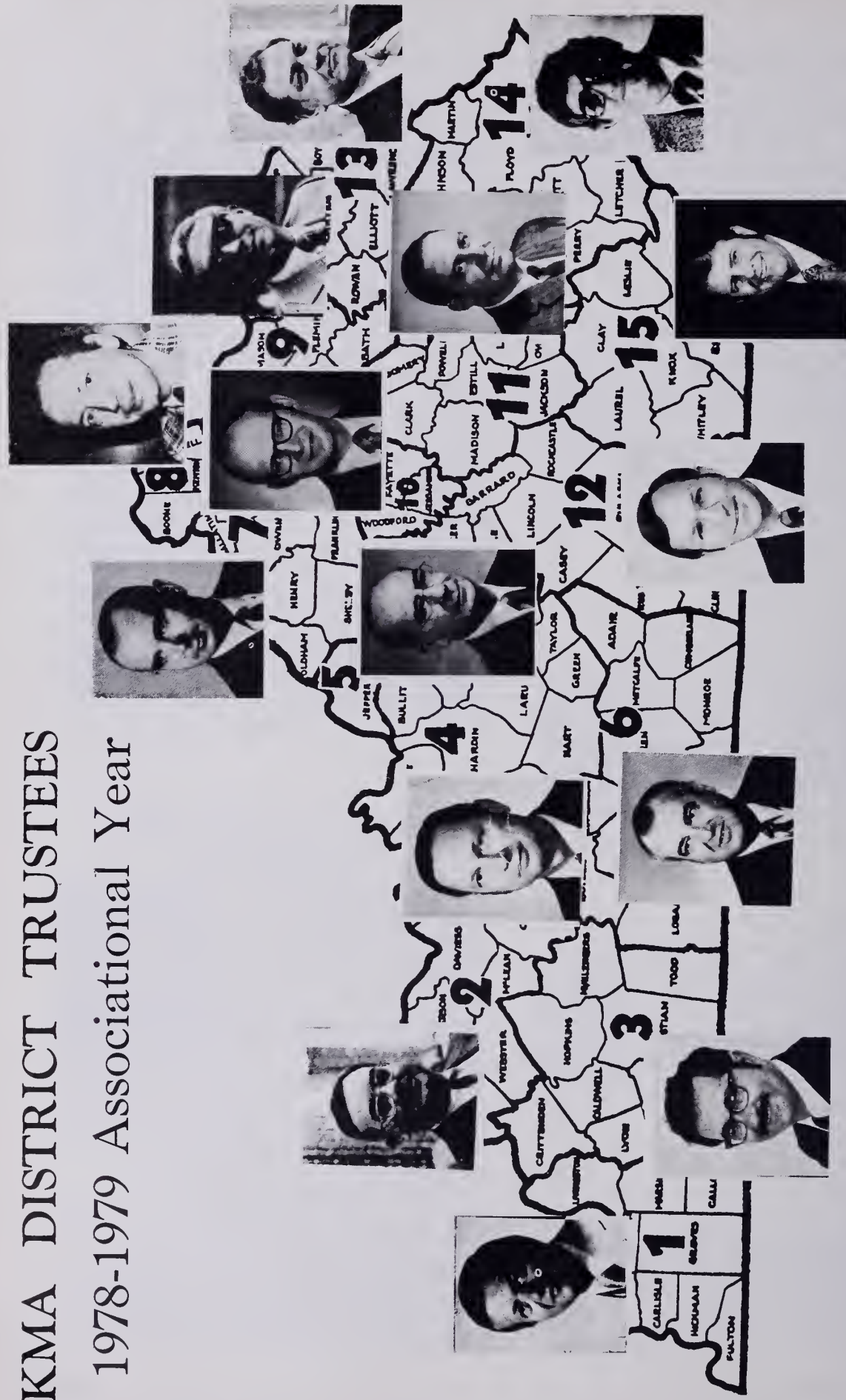
The phone number at the Headquarters Hotel, Ramada Inn, is (502) 491-4830. You may be reached during the meetings of the House of Delegates at that number. Your name will be posted on a blackboard at the front of the room when you receive a call.

You are urged to make use of the Message Center. Be sure to leave these numbers at your home, office and hospital.



# KMA DISTRICT TRUSTEES

## 1978-1979 Associational Year



- |                                    |                                  |                                    |                                     |                                   |                                     |
|------------------------------------|----------------------------------|------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|
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| 13. HOWARD B. MCWHORTER<br>Ashland | 14. HARVEY A. PAGE<br>Pikeville  | 15. DONALD C. BARTON<br>Corbin     |                                     |                                   |                                     |

# KMA DELEGATES

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## BOURBON

## BOYD

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## CARROLL

Cecil D. Martin, Carrollton

## CARTER

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## CLAY

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## Reference Committee Activity

Speaker Bennett L. Crowder, II, M.D., Hopkinsville, will assign all officers' and committees' reports and resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9:00 a.m., Monday, September 24. A brief session for Reference Committee Chairmen will be held at 12:30 p.m., Monday, in the Delta Queen Room of the Bluegrass Convention Center. Any KMA member wishing to testify on any resolution or report is urged to be present for the **Reference Committee meetings** which will be held at 2:00 p.m., Monday, September 24, in the Convention Center. These open sessions will last one hour, in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented at the final session of the House, Wednesday evening, September 26, in the Julia Belle Room of the Convention Center.

As Speaker of the House of Delegates, Doctor Crowder is in the process of finalizing appointments to the six Reference Committees, Credentials Committee, and Tellers Committee.

If your society has not yet submitted the name of your Delegate(s) to the Headquarters Office, you should do so immediately as only those names recorded in the office can be considered for appointment to one of these important committees.

A complete listing of members who will be serving on the six Reference Committees and the location of the Reference Committee meetings will be published in the September issue of the KMA Journal.

Anyone desiring names of Reference Committee members prior to the September issue being published should contact the Headquarters Office.

# ELECTIONS

## Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and five Alternate Trustees at its second regular session Wednesday, September 26. Nominations will be made by the Delegates from the electing Districts at a meeting following the first session of the House on Monday, September 24.

The Nominating Committee will report at the close of the first scientific session on Tuesday, September 25. Further nominations may be made from the floor at the final session of the House on Wednesday evening, September 26. All nominations are considered and acted upon by the Delegates at this final session.

Districts electing Trustees for three-year terms are: **SECOND DISTRICT** (incumbent, R. J. Phillips, M.D., Owensboro); **SEVENTH DISTRICT** (incumbent, William H. Keller, M.D., Frankfort); **NINTH DISTRICT** (incumbent, Don R. Stephens, M.D., Cynthiana); **TENTH DISTRICT** (incumbent, Richard F. Hench, M.D., Lexington); and the **THIRTEENTH DISTRICT** (incumbent, Howard B. McWhorter, M.D., Ashland).

Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are Albert H. Joslin, M.D., Owensboro (2nd); William Powers, M.D., Shelbyville (7th); Kelly G. Moss, M.D., Maysville (9th); Colby N. Cowherd, M.D., Lexington (10th); and George R. Bellamy, M.D., West Liberty (13th).

All Trustees and Alternate Trustees are eligible for re-election to a full three-year term.

## House to Elect New Officers During Annual Meeting

KMA Officers for the 1979-80 Associational year will be elected by the House of Delegates at the close of its final session, Wednesday evening, September 26. Officers to be elected from the state at large are as follows:

| Officer   | Term      |
|---|-----------|
| President-Elect   | One Year  |
| Vice President  | One Year  |
| Delegates to the AMA (2)<br>*David B. Stevens, M.D.<br>*Fred C. Rainey, M.D.              | Two Years |
| Alternate Delegates (2)<br>*Lee C. Hess, M.D.<br>*Wally O. Montgomery, M.D.<br>*Incumbent | Two Years |

The AMA Delegates and Alternates are to be elected for two-year terms from January 1, 1980 to December 31, 1981.

### REGISTRATION INFORMATION

A registration booth will be located in the lobby of the Ramada Inn/Bluegrass Convention Center throughout the Annual Meeting. The booth will be open at 8 a.m., Tuesday, Wednesday, and Thursday, September 25-27.

Please register and wear your badge at all times while attending the meeting.

## Nominating Committee to Meet Monday, September 24

The KMA Nominating Committee will hold an open meeting at the close of the first session of the House of Delegates, Monday, September 24, in the Julia Belle Room of the Bluegrass Convention Center.

Any KMA member may confer with the Committee during this meeting. Final recommendations of the Committee will be reported at the end of the first scientific session, Tuesday morning, September 25.

Nominations may be made from the floor during the second meeting of the House of Delegates, Wednesday evening, September 26. The House will vote on the nominees at the close of this session.

Members of the Committee are as follows: W. Bruce Hamilton, M.D., Shepherdsville, Chairman; William E. Becknell, M.D., Manchester; Glenn U. Dorroh, M.D., Lexington; Charles R. Oberst, M.D., Louisville; and W. Eugene Sloan, M.D., Paducah.

### MAKE YOUR RESERVATIONS NOW

It is important that you begin to make your room reservations as soon as possible for the KMA Annual Meeting, September 24-27. The Ramada Inn/Bluegrass Convention Center at I-64 and Hurstbourne Lane will be the Headquarters Hotel, however, there are several other accommodations within easy reach of Ramada Inn and the Bluegrass Convention Center. In making your reservations, remember the first House of Delegates meeting will be Monday, September 24.



## Auxiliary Board Meeting Planned During KMA Annual Meeting

The Auxiliary to the Kentucky Medical Association will hold its fall Board Meeting, September 25-27, in conjunction with the KMA Annual Meeting at the Ramada Inn/Bluegrass Convention Center, Louisville.

Several events have been planned, and every doctor's spouse is invited. The schedule is:

### Alumni Reunions Planned During KMA Annual Meeting

The Universities of Kentucky and Louisville will share an alumni registration and information booth during the 1979 Kentucky Medical Association Annual Meeting.

Alumni are urged to visit the booth at the Ramada Inn/Bluegrass Convention Center, September 25 to 27, from 9 a.m. to 4 p.m., to locate classmates and reunion sites.

Also planned is the annual U of L Medical Alumni Reception to be held on Tuesday, September 25, 5 p.m. to 7 p.m. The location will be announced in August. U of L Medical School five year reunions will be held following the reception Tuesday evening. All classes ending in "4" and "9" will hold reunions in 1979.

For further information, contact Miss Billie Clary, (502) 588-5783.

Sept. 25

9:30 - 11:30 a.m. Fall Board Meeting, Doctor Hoyt Gardner, President of AMA, speaker.

noon Luncheon, Hurstbourne Country Club, followed by fall fashion show.

Sept. 26

8:00 - 9:00 a.m. County Presidents' Breakfast, Ramada Inn

10:00 a.m. - noon Microwave Cooking School, Session I. All sessions held at YWCA on 3rd Street.

2:00 - 5:00 p.m. CPR Course (mini-course) Ramada Inn

7:00 - 9:00 p.m. Microwave Cooking School, Session II

Sept. 27

10:00 a.m. - noon Microwave Cooking School, Session III

The Auxiliary Hospitality Suite is #1172 at the Ramada Inn. For more information contact: Mrs. Gordon Betts, AKMA President, 11 Edgewood, Somerset, Ky. 42501 or Mrs. Arthur T. Daus, Chairman, 505 Altagate Rd., Louisville, Ky. 40206.

## KMGA Schedules Golf Tournament For September 26

### Application

#### KMGA

The Kentucky Medical Golf Association will hold its annual fall tournament on Wednesday, September 26, at the Hurstbourne Country Club in Louisville.

Members of KMGA may tee off between 11 a.m. and 1:00 p.m. on that day. Fees are to be paid at time of play.

To: Kentucky Medical Golf Association  
Donald L. Ware, M.D.  
750 Medical Towers South  
Louisville, Kentucky 40202

Gentlemen:

Please enroll me as a member of KMGA. Fees to be paid at time of play.

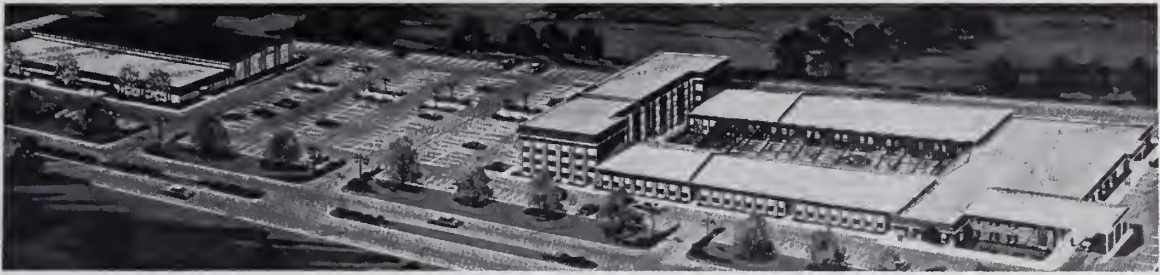
Name \_\_\_\_\_ M.D.

Address \_\_\_\_\_

Zip Code \_\_\_\_\_

Club Affiliation \_\_\_\_\_

Current Handicap \_\_\_\_\_



Bluegrass Convention Center

Ramada Inn

Louisville, Kentucky

## Annual Meeting Special Features

**SCIENTIFIC SESSIONS** are scheduled for September 25, 26, and 27 at the Ramada Inn/Bluegrass Convention Center, Louisville. Themes of the four general sessions are "Trauma," "The World of Cancer," "The Biliary Tree," and "Recent Advances in Medical Practice." Both the presentations and discussion periods will contribute to the continuing medical education of Kentucky physicians.

**TWENTY-ONE SPECIALTY GROUPS** will hold meetings on the afternoon of September 25 and 27. Beginning at 1:30 p.m., the meetings will be held in Ramada Inn/Bluegrass Convention Center with the exception of the Kentucky Dermatological Society, which will meet at Norton-Children's Hospital, Louisville. Individual programs of the specialty societies are listed in this issue. No general sessions are scheduled during the specialty group meetings and all KMA members are invited to attend any specialty meetings.

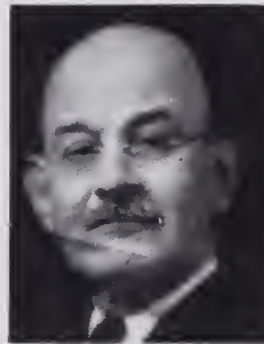
**SCIENTIFIC AND TECHNICAL EXHIBITS** will display new medical products, services, and techniques at the Bluegrass Convention Center during the 1979 Annual Meeting. Members and guests are urged to take the opportunity to view products of interest at the 30-minute intermissions scheduled during each general and specialty session.

**THE KMA HOUSE OF DELEGATES** will meet twice during the Annual Meeting. The first session of the House will be held at 9 a.m. Monday, September 24, in the Julia Belle room of the Ramada Inn/Bluegrass Convention Center. The final session will be held Wednesday, September 26, at 6 p.m., in the Julia Belle room also. Officers for the 1979-80 Associational year will be elected at the second session.

**ALUMNI REUNIONS** will be held again this year for ten classes of the University of Louisville School of Medicine. Information regarding these reunions may be obtained by contacting the chairman of the specific year or may be picked up at the alumni booth at the Annual Meeting.

**THE PRESIDENT'S LUNCHEON** will feature the Executive Vice President of the American Medical Association James H. Sammons M.D. Held at 11:50 a.m., Wednesday, September 26, in the Julia Belle room of the Bluegrass Convention Center, the Luncheon also will include the presentation of KMA awards and the installation of the 1979-80 KMA President, Robert S. Howell, M.D.

### 1979 Annual Meeting To Honor Past President Barrow



Doctor Barrow

The 1979 Annual Meeting of the Kentucky Medical Association will be officially titled "The David Barrow Memorial Meeting, in remembrance of the 1899 President of the Association.

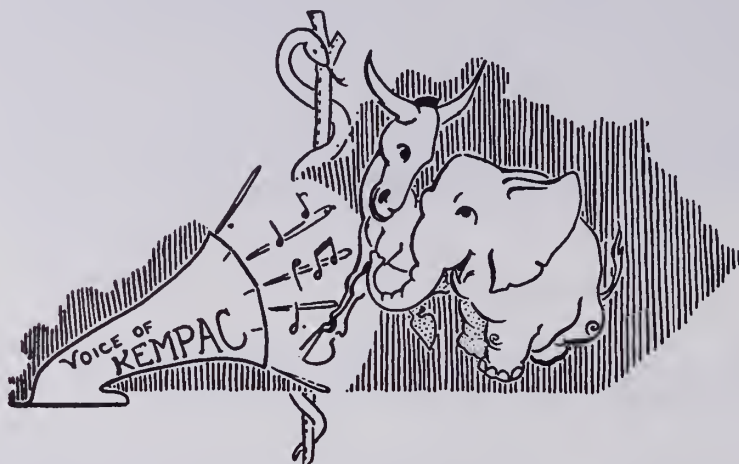
The tradition of honoring a past president of KMA and other distinguished physicians originated at the 1935 Annual Meeting.

Eugene H. Conner, M.D., Louisville, KMA Historian, has written a biography on Doctor Barrow for the Annual Meeting program booklet to be distributed during the meeting in Louisville, September 24-27.

### U OF L - UK INFORMATION BOOTH

All alumni are invited to drop by the joint U of L-UK information booth for help in locating friends and classmates and to get the latest information on the progress at the Medical School, Health Sciences Center, and University of Louisville.





## YOU ARE INVITED

To Attend the Seventeenth  
Annual KEMPAC Seminar

Monday, September 24, 1979  
6:00 p.m. EDT—Reception  
7:00 p.m.—Dinner with program  
to follow

Julia Belle Room  
Ramada Inn  
Bluegrass Convention Center  
Louisville, KY.

featuring

Kentucky's Gubernatorial Candidates  
Governor Louie B. Nunn (R)  
John Y. Brown, Jr. (D)

and

Michael P. Levis, M.D., Chairman  
American Medical Political Action  
Committee

Tickets are \$15 each. They can be purchased from a KEMPAC  
director, or by sending your check payable to KEMPAC to  
3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

### 1978-1979 KEMPAC BOARD MEMBERS

Wally O. Montgomery, M.D., Chairman      John P. Broderson, M.D., Vice Chairman  
Lee C. Hess, M.D., Secretary      Donald R. Neel, M.D., Treasurer      James A. Freer, M.D., Assistant Treasurer

#### First Congressional District

James Brashear, M.D.—Box 469; Cen-  
tral City, Ky. 42330  
Wally O. Montgomery, M.D.—3690 Marl-  
borough Way; Paducah, Ky. 42001

#### Second Congressional District

James A. Freer, M.D.—912 Woodland  
Drive; Elizabethtown, Ky. 42701  
Donald R. Neel, M.D.—2816 Veach  
Road; Owensboro, Ky. 42301

#### Third Congressional District

Stephen Smith, M.D.—3950 Kresge Way;  
Louisville, Kentucky 40207  
Sam D. Weakley, M.D.—103 Baptist East  
Doctors Building; Louisville, Ky. 40207

#### Fourth Congressional District

Lee C. Hess, M.D.—7555 Dogwood;  
Florence, Ky. 41042

Thomas R. Watson, M.D.—2 River Hill  
Road; Louisville, Ky. 40207

#### Fifth Congressional District

P. Bruce Barton, M.D.—Doctors Park;  
Corbin, Ky. 40701  
Stephen T. Jasper, M.D.—701 Leaf Lane;  
Somerset, Ky. 42501

#### Sixth Congressional District

John P. Broderson, M.D.—309 Shelby  
Street; Frankfort, Ky. 40601  
Ward O. Griffen, Jr., M.D.—U of K  
Medical Center, Dept. of Surgery;  
Lexington, Ky. 40506

#### Seventh Congressional District

John W. Harrison, M.D.—Rt. 4, Box 93;  
Ashland, Ky. 41101  
Terry Wright, M.D.—Elkhorn City, Ky.  
41522

#### Represent Auxiliary to KMA

Mrs. Ballard Cassady (Ann)—Box 2469;  
Pikeville, Ky. 41501  
Mrs. Marcus Dillon (Edith)—3336 Brae-  
mer Drive; Lexington, Ky. 40502  
Mrs. George W. Schafer (Pat)—732  
Greenridge Lane; Louisville, Ky. 40207  
Mrs. N. H. Talley (Shirley)—110 E. Wash-  
ington Street; Princeton, Ky. 42445

#### Exofficio Members

Donald C. Barton, M.D.—Doctors Park;  
Corbin, Ky. 40701  
Carl Cooper, Jr., M.D.—Bedford, Ky.  
40006  
Hoyt D. Gardner, M.D.—Suite 304,  
Baptist East Doctors Bldg., Louis-  
ville, Ky. 40207  
John C. Quertermous, M.D.—205 Eighth  
Street; Murray, Ky. 42071  
C. Kenneth Peters, M.D.—1911 Hurst-  
bourne Circle; Louisville, Ky. 40220  
Fred C. Rainey, M.D.—912 Woodland  
Drive; Elizabethtown, Ky. 42701

## Number to Use for Messages is 502-491-1929

A Message Center will be set up during the 1979 KMA Annual Meeting.  
This is a central hotel number through which all messages will be routed.

The Message Center will be located inside the lobby of the Bluegrass  
Convention Center.

# 1979 Annual Meeting Program Summary

## Kentucky Medical Association

September 23, 24, 25, 26 and 27

Bluegrass Convention Center/Ramada Inn

Louisville

### SATURDAY, SEPTEMBER 22

6:00 p.m. Dinner Meeting, KMA Executive Committee ..... Mississippi Queen Room, Convention Center

### SUNDAY, SEPTEMBER 23

9:00 a.m. KMA Board of Trustees Meeting and Dinner (noon) ..... Mississippi Queen Room, Convention Center

### MONDAY, SEPTEMBER 24

9:00 a.m. First Meeting, KMA House of Delegates ..... Julia Belle Room, Convention Center  
12:30 p.m. Luncheon, Reference Committee Chairman ..... Delta Queen Room, Convention Center  
2:00 p.m. Reference Committee Meetings ..... Cincinnati Room, Island Queen-Idlewild Rooms, Majestic-New Orleans Rooms, Grand Republic Room, Mississippi Queen Room, Natchez Room, Convention Center  
6:00 p.m. KEMPAC Reception, Banquet and Seminar ..... Julia Belle Room, Convention Center

### TUESDAY, SEPTEMBER 25

8:00 a.m. Registration ..... Lobby, Convention Center  
8:50 a.m. Opening Ceremonies ..... Scientific Assembly Hall, Convention Center  
9:00 a.m. First Scientific Session ..... Scientific Assembly Hall, Convention Center  
12:00 noon Luncheon, Meeting Executive Committee and Reference Committee Chairmen ..... Louisville Room, Ramada Inn  
1:30 p.m. Specialty Group Sessions, Convention Center (Eleven Specialty Groups will meet simultaneously at this time. Their programs begin on page 430)  
5:30 p.m. Reception Honoring Robert S. Howell, M.D. and Mrs. Warren Cox ..... Poolside, Ramada Inn

### WEDNESDAY, SEPTEMBER 26

9:00 a.m. Second Scientific Session ..... Scientific Assembly Hall, Convention Center  
11:50 a.m. President's Luncheon ..... Julia Belle Room, Convention Center  
2:00 p.m. Third Scientific Session ..... Scientific Assembly Hall, Convention Center  
3:00 p.m. Board of Trustees Meeting and Dinner (5 p.m.) ..... Mississippi Queen Room, Convention Center  
6:00 p.m. Second Meeting, KMA House of Delegates ..... Julia Bell Room, Convention Center

### THURSDAY, SEPTEMBER 27

9:00 a.m. Fourth Scientific Session ..... Scientific Assembly Hall, Convention Center  
12:00 noon Luncheon Meeting, Board of Trustees ..... Jeffersonian Room, Ramada Inn  
1:30 p.m. Specialty Group Sessions, Convention Center (Nine Specialty Groups will meet simultaneously at this time. Their programs begin on page 435)

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting Scientific and Technical Exhibits

*(Full Scientific Program begins on next page)*



# The Kentucky Medical Association SCIENTIFIC PROGRAM

## David Barrow Memorial Meeting Bluegrass Convention Center, Louisville

**TUESDAY, SEPTEMBER 25**

### MORNING SESSION General Session

*Carl Cooper, Jr., Bedford  
KMA President, Presiding*

- Theme: "Trauma"
- 8:50 a.m. Opening Ceremonies
- 9:00 a.m. "Emergency Transportation & Triage  
Richard Levy, M.D., Cincinnati, Ohio
- 9:20 a.m. "Mobile Basic and Advanced Life Support in  
Traumatic Emergencies"  
Roger D. White, M.D., Rochester, Minn.
- 9:40 a.m. "Initial Assessment of Abdominal Injuries"  
William Olsen, M.D., Ann Arbor, Mich.
- 10:00 a.m. Intermission
- 10:30 a.m. "Thoracic Injuries"  
E. Truman Mays, M.D., Somerset, Ky.
- 10:50 a.m. "The Seatbelt Triad"  
E. Shannon Stauffer, M.D., Springfield, Ill.
- 11:10 a.m. "Vascular Disease of the Central Nervous Sys-  
tem"  
John L. Fox, M.D., Morgantown, W. Va.
- 11:30 a.m. "Evaluation of the Patient Suspected of Having  
Genitourinary Injury"  
Donald R. Smith, M.D., Piscataway, N.J.

### AFTERNOON SESSION Specialty Group Meetings

*(Specialty groups will have simultaneous scientific pro-  
grams beginning at 1:30 p.m. No general session will be  
held at this time.)*

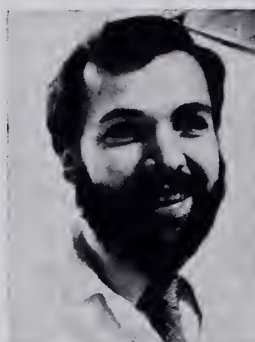
#### Kentucky Society of Anesthesiologists

##### General Sessions Hall

*Combined meeting with the Kentucky Chapter,  
American College of Surgeons*

- 1:30 p.m. "The Woman in the Case"  
Robert S. Sparkman, M.D., Dallas, Tex.
- 2:30 p.m. Intermission to Visit Exhibits

**RICHARD C. LEVY, M.D.**  
Cincinnati, Ohio



Director, Division of Emergency Medicine, University of Cincinnati College of Medicine. Director, Emergency Department, Cincinnati General Hospital. M.D., 1972, University of Louisville, School of Medicine. Member, Research Committee, American College of Emergency Physicians; National Faculty for Advanced Life Support, American Heart Association; Consultant, WCPO TV, Cincinnati; Executive Council, University Association of Emergency Medicine.

**ROGER D. WHITE, M.D.**  
Rochester, Minnesota

Assistant Professor, Department of Anesthesiology, Mayo Medical School; Medical Director, Gold Cross Ambulance Service, Inc., Rochester, Minnesota. M.D., 1964, University of Michigan, Ann Arbor, Michigan. Chairman, Resuscitation Committee, Mayo Clinic. Member, American Society of Anesthesiologists; American College of Cardiology; Chairman, American Heart Association Minnesota Affiliate, Subcommittee on Emergency Cardiac Care.



**WILLIAM R. OLSEN, M.D.**  
Ann Arbor, Michigan



Clinical Professor of Surgery, University of Michigan. Staff, St. Joseph Mercy Hospital, Ypsilanti, Michigan. M.D., 1957, University of Michigan. Member, Western Surgical Association; Association for Academic Surgery; President, Michigan Chapter, American College of Surgeons, 1975; Council Member, Michigan Society of Critical Care Medicine, 1975; Central Surgical Association.

**E. TRUMAN MAYS, M.D.**  
Somerset, Kentucky



Active staff, Lake Cumberland Medical Center, Somerset, Kentucky. M.D., 1958, University of Louisville. Member, Society of University Surgeons; Central Surgical Association; Kentucky Surgical Society; American College of Surgeons; American Association for the Advancement of Science. Appointed by Mayor (Louisville) as Project Director for Emergency Medical Services 1972-1974.

**EDWARD S. STAUFFER, M.D.**  
Springfield, Illinois

Chairman, Division of Orthopaedics and Rehabilitation, Southern Illinois University School of Medicine, Springfield, Illinois. Professor of Orthopaedic Surgery, Southern Illinois University School of Medicine. M.D., 1959, Temple University Medical School, Pennsylvania. Member, American Academy of Orthopaedic Surgeons; American Congress of Rehabilitation Medicine; Association of Orthopaedic Chairmen.



**JOHN L. FOX, M.D.**  
Morgantown, West Virginia



Professor of Neurosurgery, West Virginia University Medical Center, Morgantown, W. Va. M.D., 1959, George Washington University School of Medicine, Washington, D.C. Member, attending staff in neurosurgery, West Virginia University Medical Center, Morgantown. Member, Congress of Neurological Surgeons; Neurosurgical Society of the Virginias; Neurosurgical Forum; Monongalia County Medical Society; West Virginia State Medical Association. Consultant to the United States Peace Corps, 1967; Consultant to the National Institutes of Health; Consultant to Government of Nicaragua, 1975.

**DONALD R. SMITH, M.D.**  
Piscataway, New Jersey

Professor of Surgery, Chief Section of Urology, Rutgers Medical School, Piscataway, New Jersey. M.D., 1935, University of California, San Francisco. Staff member, Raritan Valley Hospital, New Jersey and Middlesex General Hospital, New Jersey. Consultant in Urology, University of Alexandria, Egypt, 1976-1977, for Project HOPE. Member, New York Section of the American Urological Association; New Jersey Medical Society; American Association of Medical Colleges, Society for Pediatric Urology; author of numerous articles on Urology.



**Natchez Room**

- 3:00 p.m. "Cardiac Electrophysiology and Cardiac Arrhythmias"  
Roger D. White, M.D., Rochester, Minn.

**Kentucky Chapter  
American College of Chest Physicians**

**Julia Belle Room**

- 1:30 p.m. "Thoracic & Cardiovascular Surgery in the First People's Republic of China"  
Harold C. Urschel, Jr., M.D., Dallas, Tex.  
2:30 p.m. Intermission to Visit Exhibits  
3:30 p.m. Roundtable Discussions  
"Mediastinoscopy"  
Norman J. Snow, M.D., Louisville  
"Needle Aspiration of Lung Mass"  
Robert W. Powell, M.D., Louisville  
"Esophagus"  
Harold C. Urschel, Jr., M.D., Dallas, Tex.

**Kentucky Chapter  
American College of Emergency Physicians**

**Eclipse Room**

- 1:30 p.m. "Overview and the Cincinnati Experience"  
Richard Levy, M.D., Cincinnati, Ohio  
"The Role of the E.M.T. & Paramedic"  
Mr. Richard N. Bartlett, Louisville  
"The Role of the Physician"  
Donald M. Thomas, M.D., Louisville  
2:30 p.m. Intermission to Visit Exhibits  
3:00 p.m. Scientific Presentation  
3:30 p.m. Business Meeting

**Kentucky OB-GYN Society**

**General Sessions Hall**

*Combined meeting with the Kentucky Chapter,  
American College of Surgeons*

- 1:30 p.m. "The Woman in the Case"  
Robert S. Sparkman, M.D., Dallas, Tex.

**Julia Belle Foyer**

- 2:00 p.m. "Gynecologic Malignancy"  
John W. Roddick, Jr., M.D., Springfield, Ill.  
2:30 p.m. Intermission to Visit Exhibits  
3:00 p.m. "Gynecologic Malignancy"  
John R. vanNagell, Jr., M.D., Lexington  
3:30 p.m. Annual Business Meeting

**Kentucky Orthopaedic Society**

**Mississippi Queen Room**

- 1:30 p.m. "A Ten Year Review of the Total Hip Replacement: Experience and Pitfalls"  
Bryant A. Bloss, M.D., Evansville, Ind.  
1:50 p.m. Discussion  
1:55 p.m. "Experience with the Judet Cementless Hip: An Early Report"  
S. Pearson Auerbach, M.D., Louisville



- 2:15 p.m. "Rotator Cuff Injuries"  
Rodger Zwemer, M.D., Louisville  
Wayne W. Kotcamp, M.D., Louisville
- 2:40 p.m. Discussion
- 2:45 p.m. "Early Weight Bearing in the Treatment of Tibial Shaft Fractures"  
W. K. Massie, M.D., Lexington
- 3:05 p.m. Discussion  
Intermission to Visit Exhibits
- 3:40 p.m. "The Sequelae of Spinal Instability Due to Trauma"  
E. Shannon Stauffer, M.D., Springfield, Ill.
- 4:10 p.m. Discussion
- 4:15 p.m. "Internal Fixation of Spinal Fractures: Fusion Versus Non-Fusion"  
H. Brooks Morgan, M.D., Lexington  
Ari Uematsu, M.D., Lexington  
John H. Kavanaugh, M.D., Lexington
- 4:35 p.m. Discussion
- 4:40 p.m. Business Meeting

### Kentucky Society of Pathologists

#### Cincinnati Room

- 1:30 p.m. "Diagnosis and Treatment of Non-Invasive Carcinoma of the Breast"  
Paul Peter Rosen, M.D., New York, N.Y.
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. "Diagnosis and Treatment of Non-Invasive Carcinoma of the Breast"  
Paul Peter Rosen, M.D., New York, N.Y.

### Kentucky Chapter American Academy of Pediatrics

#### Grand Republic Room

Program to be Announced

### Kentucky Society for Plastic and Reconstructive Surgery

#### Majestic-New Orleans Room

- 1:30 p.m. "Surgery of Pigmented Skin Lesions"  
Charles A. Kincaid, M.D., Louisville  
"Treatment of Basal Cell Carcinoma"  
Gerald D. Verdi, M.D., Louisville  
Discussion of First Two Papers  
"Management of Facial Lacerations"  
(Speaker to be announced)  
"Subcutaneous Mastectomy"  
Norman M. Cole, M.D., Louisville  
Discussion of Third and Fourth Pages
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. "New Twists for the Old Ropes"  
Richard A. Mladick, M.D., Virginia Beach, Va.  
University of Kentucky Presentation  
"Microarterial Anatomy of Dorsalis Pedis Flap"  
Daniel Man, M.D., Louisville  
Robert D. Acland, M.D., Louisville  
Discussion of University Papers

### Kentucky Chapter American College of Surgeons

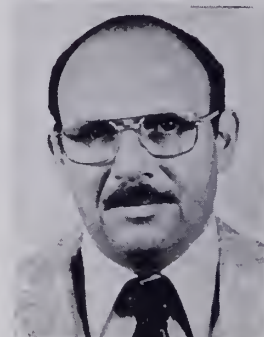
### ROBERT L. BAEHNER, M.D. Indianapolis, Indiana



Director, Pediatric Hematology-Oncology, James Whitcomb Riley Hospital for Children, Indiana University School of Medicine, Indianapolis. Professor of Pediatrics, Professor of Clinical Pathology, Indiana University School of Medicine, Indianapolis. Member, American Heart Association — Scientific Council; American Academy of Pediatrics; American Association of Immunologists; American Association of Pathologists.

### PAUL P. ROSEN, M.D. New York, New York

Associate Professor of Pathology, Cornell University School of Medicine, Attending Pathologist, Memorial Sloan-Kettering Cancer Center, New York, New York. M.D., 1964, College of Physicians and Surgeons, Columbia University, 1964. Consultant, National Cancer Institute, Breast Cancer Task Force as Project Site Examiner. Consulting Editor, Breast-Disease of the Breast; Co-editor: Pathology Annual; Member, Editorial Board, American Journal of Surgical Pathology.



### HAROLD C. URSCHEL, JR., M.D. Dallas, Texas



Clinical Professor of Thoracic and Cardiovascular Surgery, University of Texas Health Science Center, Dallas. Director and Examiner, American Board of Thoracic Surgery. M.D., 1955, Harvard University. Editorial Board, The Dallas Medical Journal, Dallas. Member, American College of Surgeons, American Surgical Association, American Cancer Society; New York Academy of Sciences; American College of Cardiology.

### RICHARD A. MLADICK, M.D. Virginia Beach, Virginia

Chief, Department of Plastic Surgery, Medical Center Hospitals; Director, Head and Neck Clinic, Norfolk General Hospital, M.D., 1959, Northwestern University Medical School. Fellow, American College of Surgeons; Advanced Clinical Fellow, American Cancer Society; Governors Advisory Council on Emergency Medical Services, Williamsburg, 1977. President, Virginia Society of Plastic and Reconstructive Surgeons, 1973-1974. Member, American Association of Hand Surgery; American Association of Plastic Surgeons; Plastic Surgery Research Council.



**THOMAS D. STEVENSON, M.D.**  
Columbus, Ohio



Professor, Pathology, Ohio State University Hospitals. M.D., Ohio State University College of Medicine. Member, American Federation Clinical Research; American Society of Hematology; American Society of Clinical Pathology; American Cancer Society Fellowship Committee; First President American Society of Clinical Oncology. Author of numerous scientific articles.

**BETTY J. PFEFFERBAUM, M.D.**  
Houston, Texas

Assistant Professor of Psychiatry and Pediatrics, Department of Psychiatry, The University of Texas Medical School, Houston; Assistant Professor of Pediatrics (Psychiatry), M.D. Anderson Hospital and Tumor Institute, Houston; Training Consultant, Children's Mental Health Services, Houston, M.D., 1972, University of California, School of Medicine, San Francisco. Invited participant for the American Medical Association Workshop, Mental Health of Children in Traditional Families, Chicago. Member, American Academy of Child Psychiatry; American Psychiatric Association; Southern California Psychiatric Society; Houston Psychiatric Society.



**JOHN W. RODDICK, JR., M.D.**  
Springfield, Illinois



Professor and Chairman of Obstetrics and Gynecology, Southern Illinois University School of Medicine. Courtesy staff, Doctors Memorial Hospital, Carbondale, Illinois. M.D., 1950, Northwestern University Medical School. Chairman, Editorial Board, Illinois Medical Journal; American College of Surgeons Representative to CREOG. Member, American Association of Obstetricians and Gynecologists; American College of Obstetricians and Gynecologists; American College of Surgeons.

**ROBERT S. SPARKMAN, M.D.**  
Dallas, Texas

Chief, Department of General Surgery, Baylor University Medical Center, Dallas. Private practice of surgery, Dallas. M.D., 1935, Baylor Medical School, Dallas. Editorial Board, The American Journal of Surgery; Consulting Editor, Selected Readings in General Surgery; Board of Directors, Baylor University Medical Center Foundation; President, Southern Surgical Association. Member, Societe Internationale de Chirurgie; American Surgical Association; Dallas Society of General Surgeons.



**General Sessions Hall**

- 1:30 p.m. "The Woman In The Case"  
Robert S. Sparkman, M.D., Dallas, Texas
- 2:30 p.m. Break
- 3:00 p.m. "Liver Injuries"  
William R. Olsen, M.D., Ann Arbor, Mich.
- 3:40 p.m. "Scintiscans in Biliary Tract Disease"  
M. D. Ram, M.D., Lexington
- 3:55 p.m. "Ischemic Colitis After Aortic Reconstruction"  
Pat Hagihara, M.D., Lexington
- 4:10 p.m. "Squamous Metaplasia of Lactiferous Glands"  
Charles Sachatello, M.D., Lexington

**Kentucky Neurosurgical Society**

**Delta Queen Room**

- 1:30 p.m. "Proximal Arterial Changes After AVM Surgery"  
Henry D. Garretson, M.D., Louisville
- 1:40 p.m. "Micro-Vascular Damage and Thrombus Formation in Small Blood Vessels"  
Robert D. Acland, M.D., Louisville
- 1:55 p.m. "Micro-Vascular Free-Flap Reconstruction in Head and Neck Surgery"  
Robert D. Acland, M.D., Louisville
- 2:10 p.m. "The Surgical Anatomy of Intra-Cranial Aneurysms"  
John L. Fox, M.D., Morgantown, W. Va.
- 2:55 p.m. "The Use of EMV Scores in Predicting the Ultimate Outcome of Severe Head Injuries"  
Alfred B. Young, M.D., Lexington
- 3:05 p.m. "The Value of Initial CT Scanning in Predicting Final Neurological Outcome In Severe Head Injuries"  
David Eggers, M.D., Lexington
- 3:15 p.m. "The Clinical Significance of the Hemo-Dynamic Changes Occurring After Cervical Spinal Cord Injury"  
Phillip Tibbs, M.D., Lexington
- 3:25 p.m. Break
- 3:35 p.m. "Treatment of Vertebral Body Malignancy"  
Richard K. Jelsma, M.D., Louisville
- 3:45 p.m. "Monitoring and Fluid Administration in Severe Pediatric Cranio-Cerebral Trauma"  
A. Leland Albright, M.D., Louisville
- 3:55 p.m. "Isodense Subdural Hematomas Presenting As Paraplegia"  
Christopher B. Shield, M.D., John Miles, M.D., and Henry D. Garretson, M.D., Louisville
- 4:05 p.m. "A Study of the Duration and Quality of Survival in Glioblastoma Patients Receiving Combined Chemotherapy"  
Richard H. Mortara, M.D.
- 4:15 p.m. "Pituitary Tumors: Postoperative Evaluation By CT Scanning"  
A. J. Dzenitis, M.D., J. J. Guarnaschelli, M.D., and George F. Drasin, M.D., Louisville
- 4:25 p.m. Business Meeting

**Kentucky Urological Association**



- 1:30 p.m. "Radiculitis"  
Donald R. Smith, M.D., Piscataway, N.J.
- 2:15 p.m. IV Pyelogram
- 2:30 p.m. Intermission to Visit Exhibits

## WEDNESDAY, SEPTEMBER 26

### MORNING SESSION

#### General Session

*Harold L. Bushey, M.D., Barbourville  
KMA Vice-President, Presiding*

- Theme: "The World of Cancer"
- 9:00 a.m. "Current Status of Chemotherapy in Childhood Cancer"  
Robert L. Baehner, M.D., Indianapolis, Ind.
- 9:20 a.m. "Opportunistic Infections in a Cancer Hospital"  
Paul Peter Rosen, M.D., New York, N.Y.
- 9:40 a.m. "Staging of Carcinoma of the Lung: A. Superior Sulcus Tumor; B. Bronchoplasty Procedures"  
Harold C. Urschel, Jr., M.D., Dallas, Tex.
- 10:00 a.m. Intermission
- 10:30 a.m. "Challenging Reconstructive Surgery After Cancer"  
Richard Anthony Mladick, M.D., Virginia Beach, Va.
- 10:50 a.m. "Therapeutic Options in the Patient with Advanced Cancer"  
Thomas Stevenson, M.D., Columbus, Ohio
- 11:10 a.m. "Are You Listening, Doctor?"  
Betty Pfefferbaum, M.D., Houston, Tex.
- 11:30 a.m. "Diagnosing Gynecologic Cancer in the Office"  
John W. Roddick, M.D., Springfield, Ill.

## PRESIDENT'S LUNCHEON

Julia Belle Room  
Bluegrass Convention Center  
11:50 a.m.

*Carl Cooper, Jr., M.D., Bedford  
KMA President, Presiding*

#### Invocation

#### Recognition

#### Awards Presentation

*Fred C. Rainey, M.D., Elizabethtown  
Chairman, KMA Awards Committee*

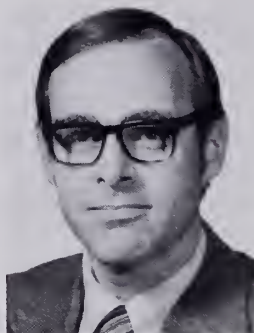
#### Luncheon Speaker

*James H. Sammons, M.D.  
Executive Vice President  
American Medical Association*

Installation of the New KMA President

## WEDNESDAY, SEPTEMBER 26

### JOHNSON L. THISTLE, M.D. Rochester, Minnesota



Consultant in Internal Medicine and Gastroenterology, Mayo Clinic, Rochester, Minnesota. M.D., 1964, Temple University School of Medicine, Philadelphia, Assistant Professor of Medicine, Mayo Medical School, 1973 to 1976; Associate Professor of Medicine, Mayo Medical School, 1976. Member, Fellow of the American College of Physicians; American Gastroenterological Association; American Federation for Clinical Research.

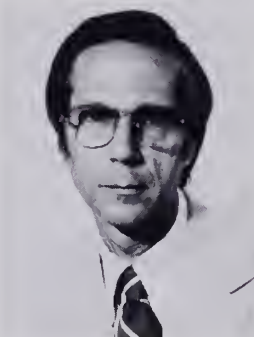
### DAVID S. ZIMMON, M.D. New York, New York

Chief, Gastroenterology, New York Veterans Administration Medical Center. Professor, Clinical Medicine, New York University School of Medicine. M.D., 1958, Harvard Medical School. President, New York Society for Gastrointestinal Endoscopy, 1976. Member, New York County Medical Society; Medical Research Society, London, England; Boylston Medical Society, Harvard Medical School; American Federation for Clinical Research; American Society for Gastrointestinal Endoscopy.



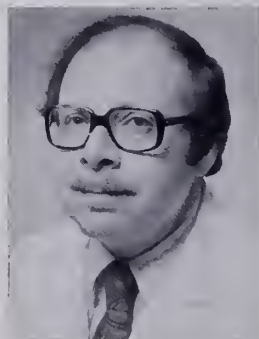
### ROBERT N. BERK, M.D. San Diego, California

Professor and Chairman, Department of Radiology, University of California-San Diego, School of Medicine. Director, Department of Radiology, University Hospital, San Diego. Consultant-Lecturer to the Naval Regional Medical Center, San Diego. M.D., 1955, University of Pittsburgh. Member, American College of Angiology; American Roentgen Ray Society; Radiological Society of North America; California Medical Association; Society Chairman of Academic Radiology Departments.



### MARTIN D. VALENTINE, M.D. Baltimore, Maryland

Associate Professor of Medicine, The Johns Hopkins University School of Medicine, Baltimore. Associate Physician-in-Charge, The Allergy Clinic, The Johns Hopkins Hospital, Baltimore. M.D., 1960, Tufts University School of Medicine, Boston, Massachusetts. Chairman, Study Group on Hymenoptera Venoms; NIAID; Member, Advisory Panel, Allergy, Immunology and Connective Tissue Disease, United States Pharmacopeia; American Academy of Allergy, General Chairman, Research Council.



**JOHN E. WOLF, JR., M.D.**  
Houston, Texas



Clinical Instructor, Department of Dermatology, University of Texas Medical School, Houston. Assistant Professor, Department of Dermatology, Baylor College of Medicine. M.D., 1965, University of Texas Medical Branch, Galveston. Member, American Academy of Dermatology; Society for Investigative Dermatology; American Federation of Clinical Research; International Society of Tropical Dermatology; Dermatological Therapy Association, Scientific Program Chairman.

**THOMAS G. SKILLMAN, M.D.**  
Columbus, Ohio

Professor of Medicine, Department of Medicine, Ohio State University College of Medicine. Kurtz Professor of Endocrinology, Department of Medicine, Ohio State University College of Medicine. M.D., 1949, University of Cincinnati College of Medicine. Member, American Diabetes Association; American Federation of Clinical Research; Central Society for Clinical Research; American Cancer Society; Central Ohio Diabetes Association.



**RALEIGH E. LINGEMAN, M.D.**  
Indianapolis, Indiana



Professor and Chairman, Department of Otolaryngology, Indiana University School of Medicine. Visiting Professor in Head and Neck Surgery, Columbia University. M.D., 1944, Indiana University School of Medicine. Member, American College of Surgeons; American Society for Head and Neck Surgery; Indiana Medical Federation; Board of Governors, American College of Surgeons; Editorial Board, Transactions; Board of Directors, Marion County Medical Society.

**WILLIAM E. SCOTT, M.D.**  
Iowa City, Iowa

Associate Professor, Department of Ophthalmology, University of Iowa, Iowa City, Iowa. M.D., 1964, University of Iowa College of Medicine. Member, American Medical Association; Association of Research in Vision & Ophthalmology; Children's Eye Care Foundation; International Strabismus Association; Joint Commission on Allied Health Personnel in Ophthalmology, Chairman, Information and Public Relations Committee. Author of numerous scientific articles.



**AFTERNOON SESSION**  
General Session

*Stephen B. Kelley, M.D., Somerset*  
Chairman, KMA Scientific Program Committee  
Presiding

- Theme:** "The Biliary Tree"
- 2:00 p.m.** "Tumors of the Bile Duct Bifurcation"  
Robert S. Sparkman, M.D., Dallas, Tex.
- 2:15 p.m.** "Dissolution of Gallstones"  
Johnson L. Thistle, M.D., Rochester, Minn.
- 2:30 p.m.** "Endoscopic Diagnosis and Management of Biliary Tract Disease"  
David Zimmon, M.D., New York, N.Y.
- 2:45 p.m.** "Current Status of Oral Cholescystography"  
Robert N. Berk, M.D., San Diego, Calif.
- 3:00 p.m.** Intermission
- 3:30 p.m.** Panel Discussion on Biliary Tree  
Robert S. Sparkman, M.D., Moderator  
Johnson L. Thistle, M.D.  
David Zimmon, M.D.  
Robert N. Berk, M.D.

**THURSDAY, SEPTEMBER 27**

**MORNING SESSION**  
General Session

*Dwight L. Blackburn, M.D., Berea*  
Vice-Chairman, KMA Board of Trustees, Presiding

- Theme:** "Recent Advances in Medical Practice"
- 9:00 a.m.** "Hypersensitivity to Insect Stings"  
Martin D. Valentine, M.D., Baltimore, Md.
- 9:20 a.m.** "Progress in Dermatology"  
John E. Wolf, Jr., M.D., Houston, Tex.
- 9:40 a.m.** "New Diabetic"  
Thomas G. Skillman, M.D., Columbus, Ohio
- 10:00 a.m.** Intermission to Visit Exhibits
- 10:30 a.m.** "Evaluation of the Patient with Head & Neck Cancer"  
Raleigh Lingeman, M.D., Indianapolis, Ind.
- 10:50 a.m.** "Common Problems in Pediatric Ophthalmology"  
William E. Scott, M.D., Iowa City, Iowa
- 11:10 a.m.** "Responding to the Antagonistic Patient"  
William A. Bradnan, M.D., Louisville
- 11:30 a.m.** "The Significance of Antithrombin III in Primary Care"  
Don L. Copeland, M.D., Winston-Salem, N.C.

**AFTERNOON SESSION**  
Specialty Group Meetings

*(Simultaneous scientific programs of specialty groups will be held at 1:30 p.m. All KMA members are invited and no general sessions will be held this afternoon).*

**AFTERNOON SESSION**  
Specialty Group Meetings  
Kentucky Dermatological Society

Norton-Children's Hospital

- 2:00 p.m.** Clinical Cases
- 3:30 p.m.** Discussion of Cases—Auditorium



## Kentucky Society of Allergy and Clinical Immunology

### Eclipse Room

- 1:30 p.m. "Beclomethasone in the Therapy of Asthma"  
Martin D. Valentine, M.D., Baltimore Md.
- 2:00 p.m. "Review of Pediatric Asthmatic Admissions to Hospital: Relative to Rational Use of Theophylline"  
Donald T. Ellenburg, M.D., Louisville
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. "Hymenoptera Sensitivity—Diagnostic and Therapeutic Studies"  
Martin D. Valentine, M.D., Baltimore, Md.
- 3:30 p.m. Panel Discussion  
Business Meeting

## Kentucky ENT Society

### Cincinnati Room

- 1:30 p.m. Presentation of Cases Panel—"Cancer of the Pharynx & Larynx"  
George H. Rudwell, M.D., Jeffersonville, Ind.  
Thomas L. Kennedy, M.D., Louisville  
Kenneth L. Silk, M.D., Louisville
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. "Correction of Cranio-Facial Anomalies"  
Gerald D. Verdi, M.D., Louisville
- 3:30 p.m. "Brain Stem Evoked Response Audiometry"  
Mr. Rick Lazich, M.A., Louisville

## Kentucky Academy of Eye Physicians and Surgeons

### Majestic Room

### Program to be Announced

## Kentucky Chapter American Academy of Family Physicians

### Mississippi Queen Room

- 1:30 p.m. "Diabetes Mellitus: Management by the Family Physician Throughout the Human Life Cycle"  
Don L. Copeland, M.D., Winston-Salem, N.C.
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. "Anaerobic Infections of the Lung"  
E. C. Seeley, M.D., Lexington
- 3:30 p.m. "Review of a Year's Obstetrical Experience in a Kentucky Family Practice Residency Setting"  
James E. Redmon, M.D., Louisville
- 4:00 p.m. "Patient Education Group for Epileptics"  
Michael Cummins, M.D., Louisville

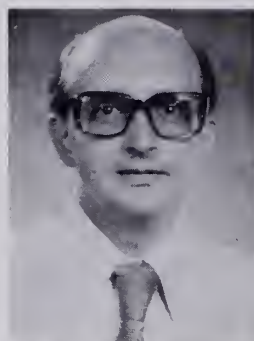
## Kentucky Occupational Medical Association

### Island Queen Room

- 1:30 p.m. "Psychiatric Drugs in the Workplace"  
Jesse H. Wright, M.D., Louisville
- 2:00 p.m. "Caring for the Emotionally Ill Worker in the Work Place"  
William A. Bradnan, M.D., Louisville

## Kentucky Chapter American College of Physicians

## WILLIAM A. BRADNAN, M.D. Louisville, Kentucky



Assistant Professor of Psychiatry and Behavioral Sciences, University of Louisville School of Medicine, M.D., 1968, Ohio State University College of Medicine, Columbus. Active staff, Norton-Children's Hospitals, Louisville. Consulting staff, Jewish Hospital, Louisville. Member, American Association for the Advancement of Science; American Association for the History of Medicine; American Association of University Professors; American Humanist Association.

## DONALD L. COPELAND, M.D. Winston-Salem, North Carolina

Director, Clinical Laboratory, Family Practice Center, Bowman Gray School of Medicine. Associate Professor, Department of Family Medicine, Bowman Gray School of Medicine, Winston-Salem, North Carolina. M.D., 1963, University of North Carolina Medical School. Chairman and Finance Committee, North Carolina Academy of Family Physicians; Chairman, Education Committee, North Carolina Academy of Family Physicians, 1975-1976. Member, North Carolina Academy of Family Physicians; Society of Teachers of Family Medicine.



### Julia Belle Room

- 1:30 p.m. "Legionnaire's Disease"  
Martin J. Raff, M.D., Louisville
- 2:00 p.m. "Refractory Anemia with Excess of Blasts—A Myelodysplastic Syndrome"  
Thomas D. Stevenson, M.D., Columbus Ohio
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. "Depression in Medical Practice"  
John J. Schwab, M.D., Louisville
- 3:30 p.m. "Current Indications for Cardiac Catheterization"  
Henry Hanley, M.D., Lexington

## Kentucky Psychiatric Association Grand Republic Room

- 1:30 p.m. "Cancer in Children"  
Betty Pfefferbaum, M.D., Houston, Tex.
- 2:00 p.m. "Sexually Abused Children: Practical Management"  
Paul Adams, M.D., Louisville
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. "Women and Therapy"  
Leah J. Dickstein, M.D., Louisville
- 3:30 p.m. Business Meeting

## Kentucky Association of Public Health Physicians

### Natchez Room

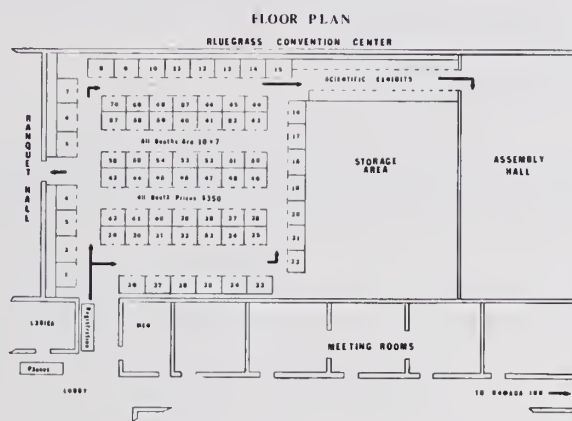
- 1:30 p.m. "Update Diabetes"  
Thomas G. Skillman, M.D., Columbus, Ohio
- 2:30 p.m. Intermission to Visit Exhibits
- 3:00 p.m. Business Meeting

# Latest Research Advances in Products and Services Offered by 1979 Technical Exhibits

The Technical Exhibits at the 1979 KMA Annual Meeting will feature the latest developments in medical techniques and information. Located in the Bluegrass Convention Center, the exhibits will condense a volume of information and ideas in such a manner that a vast amount of knowledge can be secured in a short period of time.

Prepared carefully and skillfully to appeal to you, the physician, the exhibits are especially geared to your special interests as a practitioner. Medical representatives and other exhibitors will be on hand to discuss personally their products and services with you. Both you and your patients should benefit from the information that can be gained from a visit to the Technical Exhibits.

Thirty-minute intermissions have been planned during each general and specialty group session so that every physician may take advantage of this excellent opportunity provided by the exhibits.



Floor Plan of Technical Exhibits

## 1979 Technical Exhibitors

Abbott Laboratories (43)  
Armour Pharmaceutical Co. (55)  
Automated Accounting Services, Inc. (12)

Boehringer Ingelheim, Ltd. (63)  
Blue Cross and Blue Shield of Kentucky (8)  
Burroughs Wellcome Co. (4)  
Business Systems, Inc. (59)

The Central Pharmacal Company (66)  
Cooper Laboratories (44)

Dictaphone Corporation (14)  
Division for Disability Determination (37)  
Dolbey and Company (69)

Geigy Pharmaceuticals (9)  
General Medical Louisville (17)  
Grogan, Inc. (20)  
Guild of Prescription Opticians of Ky. (40)

John Hancock Mutual Life Insurance Co. (28)  
Haney Associates, Inc. (61)  
Humana, Inc. (52)

International Clinical Laboratories of Ky. (16)  
International Medical Electronics, Ltd. (58)  
Ives Laboratories, Inc. (7)

Keep/Save of Kentucky (53)  
Kentucky Medical Insurance Company (18)  
Kremers-Urban Company (10)

The Lang Company, Inc. (34)  
Lederle Laboratories (30)  
A. P. Lee Agency, Inc. (32)  
Eli Lilly and Company (35)  
Louisville Medical Laboratory, Inc. (65)  
Lundia-Burton Sales Company (38)

Main, Inc. (67)  
Malkin Instrument Company, Inc. (1)

Mead Johnson Nutritional Division (31)  
Mead Johnson Pharmaceutical Division (49)  
The Medical Protective Company (5)

Merck Sharp & Dohme (3)  
Merrill Lynch Pierce Fenner & Smith, Inc. (24)  
Metropolitan Life—Medicare Office (60)  
Meyer Laboratories (54)  
Mitchell Orthopedic Supply (50)

NCR Corporation (39)  
Ortho Pharmaceutical Corporation (29)

Pathology and Cytology Laboratories, Inc. (36)  
Pfizer Labs (27)

William P. Poythress & Company, Inc. (21)  
Professional Accounting Systems (70)  
Professional Insurance Associates (64)  
Professional Office Systems, Inc. (11)

QSI, Inc. (51)

Reed & Carnrick Pharmaceuticals (46)  
Riker Laboratories, Inc.—3M (6)  
A. H. Robins Company (2)  
Roche Laboratories (45)  
William H. Rorer, Inc. (23)  
Ross Laboratories (15)

S. I. Computer Services, Inc. (48)  
Sandoz Pharmaceuticals (22)  
W. B. Saunders Company (33)  
Clayton L. Scroggins Associates, Inc. (19)  
Searle Laboratories (57)  
Smith Kline & French Laboratories (41)  
E. R. Squibb & Sons, Inc. (42)  
Stuart Pharmaceuticals (56)

Tab Products Company (62)

USAF Health Professions (13)  
U. S. Army Medical Department (68)  
U. S. Navy Recruiting District (47)

Wyeth Laboratories (25)

Zimmer-USA (26)



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Suite 103B, 152 East Reynolds Road  
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Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.



## ASSOCIATIONAL NEWS



### Report of the Ad Hoc Committee On Insurance Procedures And Primary Care Reimbursement

Resolution L, adopted by the House of Delegates in 1978 called for an ad hoc committee to be formed, to study issues related to health insurance, and to report the results of its study for all members of the House prior to their September 1979 meeting. The same ad hoc committee was charged to conduct a study of issues raised in Resolution Q, also adopted in 1978.

The following report addresses both resolutions.

Resolution L, submitted by the Campbell-Kenton County Medical Society, and Resolution Q, submitted by the Pulaski County Medical Society, were passed as amended by the House of Delegates in September, 1978.

Resolution L called on the Board of Trustees to appoint an ad hoc committee on medical insurance problems. That committee was to make contact with Blue Shield and other health care insurers and hold at least one well publicized meeting, at which any KMA member could appear to discuss specific problems relating to health care insurance, to include: The desirability of maintaining the category "participating physician" with regard to Blue Shield insurance; the desirability of establishing a category "participating physician" with other medical insurers; the method of reimbursing physicians by assignment of fees as it relates to all medical insurance companies; the relative merits of varying types of insurance coverage and the feasibility of making patients more aware of the various coverages available.

Resolution Q directed the Committee to undertake a complete study of the reimbursement system used by third party payors to remove imbalances in the payment for primary care as compared to non-primary care services, and to study the composition of the KMA Advisory Committee to Blue Cross-Blue Shield with regard to the representation of primary care physicians.

Because the resolutions dealt with similar subjects, the House directed that this Ad Hoc Committee be appointed to consider the issues raised in both.

Resolution L directed the Committee to report its findings to all members of the House of Delegates prior to the next session of the House, which will be held in September, 1979. To satisfy this direction from the House, the report will be published in the *KMA Journal*. The report is divided into separate sections for Resolutions L and Q. Although the House did not direct that Resolution Q be published, it, too, will be included in the *Journal* for information.

The Committee was appointed by the KMA Board of Trustees at their December, 1978 meeting. It is composed of an equal number of proponents and opponents of the issues raised in Resolutions L and Q. The members, in your Chairman's view, showed great objectivity and integrity in addressing these complex and emotional issues, and freely gave a considerable amount of their time and ability in developing the Committee's findings.

#### Resolution L

Under the direction of the Chairman, background work was begun to obtain information from Blue Shield on events leading to cessation of payment to non-participating physicians; the administrative operation of the UCR program; and the types of coverage offered. Contact was made with representatives of the Health Insurance Association of America (HIAA), a voluntary organization of the major for-profit health insurers in the country, to determine coverages offered and reimbursement procedures.

Information was sought from the AMA and other state medical associations on related experiences they had, and contact was made with the State Insurance Commissioner's office for information related to the issues contained in the resolutions. Material was received and considered, too, from primary care physician groups.

The Committee conducted a hearing open to the membership on April 1, in Louisville. The Committee agreed that it should act as a fact-finding hearing group for purposes of this meeting. All members present wishing to speak on April 1 were given the opportunity. Both Resolutions L and Q were considered at the April 1 meeting. The Committee went into executive session after the open hearing to review the material presented in the meeting, and a final meeting of the Committee was held in May. Representatives of Blue Shield and the HIAA attended our May meeting to discuss areas of concern voiced by the KMA members at the open hearing.

The topics addressed to the Committee during the April meeting included:

- The historical development of and relationship between KMA and Blue Cross-Blue Shield
- Aspects of participating and non-participating medical insurance reimbursement agreements as relates to patients, physicians and insurers
- Differences in coverage by insurance policies of surgical as compared to primary care services
- The role and composition of the KMA Blue Cross-Blue Shield Advisory Committee
- Public/policy holder awareness of insurance coverage and types of insurance available
- Patient assignment of benefits



- Insurance billing procedures and problems experienced by physicians
- The role of peer review as relates to insurers
- Socialization of medicine and cost containment issues
- The development of insurance coverage and policy procedures as a result of collective bargaining
- The responsibility of the insurance company to the patient, physician and payor
- The right of the patient to choose a physician or physicians to provide care and to choose insurance coverage payment for as much concurrent care by surgical and consulting, and primary care physicians as the patient considers necessary.

To reiterate, differentiation between the issues raised in Resolution L and Resolution Q was difficult, as they overlap in many areas. For purposes of this report, however, an attempt has been made to consider them separately. With regard to Resolution L, the Committee makes the following recommendations:

1) Because 80% of Kentucky physicians have signed Blue Shield participation agreements, the Committee recommends that this category be maintained.

2) The Committee recommends that KMA continue to make its peer review mechanism available on the same basis to all insurers that offer a Usual, Customary and Reasonable program.

3) a. Voluntary patient requests for assignment of physician reimbursement should be honored by all insurance carriers.

b. This policy should be followed with the understanding between the physician and the patient that the amount submitted to the carrier is the full fee charged to the patient.

c. KMA should reaffirm its position that any insurance carrier providing a Usual, Customary and Reasonable program to Kentucky subscribers may submit fees falling outside the insurer's established guidelines to a peer review mechanism, such as that made available by the Kentucky Medical Association, regardless of whether the fee is charged by a participating or non-participating physician.

4) The Committee recommends the endorsement of appropriate AMA publications describing types of health insurance coverage, to physicians in the state who wish to purchase them for the benefit of their patients.

## Resolution Q

The Committee made a number of observations about medical insurance from the information mentioned in the section of the report on Resolution L, and relied heavily on material that was supplied by representatives of Blue Cross-Blue Shield and HIAA, as well as earlier material received from primary care physicians.

The consumer market (the ability to buy a given service for a given price) has obviously had the strongest influence on most coverages now being bought. Most of the health insurance benefits now in effect were developed to meet the desires of the consuming public. Thus, in a free and competitive market, carriers can sell only what people will buy, even though the coverages may be inadequate. Moreover, benefits cannot be revised unless the purchasers of insurance want or can pay for changes.

Health insurance was initially designed to cover basic hospital and surgical costs. Although a significant amount of the coverage currently in force has not kept pace with changing trends in medical practice, particularly in the areas of primary and non-surgical care, the Committee feels that changes will occur to accommodate these new trends as patients become more aware of

the desirability of more comprehensive coverage. Thus, one priority should be to make people aware of the coverages they have under existing contracts AND ADDITIONAL COVERAGE WHICH THEY MIGHT ACQUIRE.

Most insurance carriers will market any type of coverage insurance purchasers desire, including "first dollar" coverage, coverage for primary care services, preventive care, family planning and so forth. In fact, some policies presently sold do provide coverage for these services; they are a portion of some basic policies; and are offered as riders to existing policies. Many are covered benefits under major medical insurance.

In Kentucky, most health insurance plans are group plans. As a result, a tremendous impact is made on the type of insurance coverage available, which is totally outside the influence of the individual patient. This is particularly evident on policies for large employee groups, which are negotiated by management and labor.

During labor negotiations, health insurance coverage is one of many negotiable benefits and must be considered by the bargainiers on both sides of the table, along with basic pay, vacation days, sick leave time, and so forth.

Given this situation, it's logical that many individual insurance recipients aren't aware of the types of insurance available, or even their specific coverage, as opposed to the types of medical services they are most likely to need. Likewise, given the volume and diversity of policies sold (522 companies writing 2400 different policies), it's most difficult to appreciate the confusion the patient/policy holder is confronted with if purchase options are available to him.

The following recommendations are made with the hope that they will encourage changes in the reimbursement system which will be of benefit to all Kentuckians.

1) KMA should urge carriers to do a better job of explaining health insurance coverages and encourage employers to do a better job of explaining benefits to employees. Insurance companies should advise individual policy holders of coverages.

2) KMA should urge all carriers to make a reasonable effort to develop and market broader coverage plans to include provisions for primary care. KMA should actively support these efforts.

3) KMA should undertake an educational program on insurance coverages, perhaps in the form of pamphlets in physicians' offices or enclosures for statements, and make an effort to better educate office and hospital administrative personnel on what coverages are.

4) KMA should work with the State Insurance Commissioner to urge carriers to make greater effort to cover primary care service and help create a greater awareness of individual policy coverages.

5) KMA should encourage and support continued experimental programs to prevent retroactive denial of diagnostic admissions. KMA should encourage reliance on medical review systems to help determine instances of questionable medical conditions, as opposed to true diagnostic admissions.

6) KMA should work with insurers to make pre-existing condition determinations more flexible so that patients with chronic conditions won't be penalized, or acute conditions not be covered, through no fault of the policy holder.

7) KMA should request the KMA Legislative Committee to investigate Kentucky health insurance laws with regard to policy modifications, and attempt to determine if

legislative action would be desirable and appropriate to change policies with greater ease, keeping in mind quality of care and the range of financial resources available to Kentucky citizens.

8) KMA should urge business and labor to allow a greater employee/member input into the selection of health insurance coverage.

9) KMA should work with insurers and urge them to develop primary and surgical coverage for concurrent care for hospitalized patients.

10) KMA should work with insurers and the Insurance Commissioner to determine the feasibility of upgrading the physician service benefit portion of indemnity contracts.

11) KMA, working through insurers and the Department of Insurance, should encourage the development of simplified claims processing procedures.

#### Other Recommendations

With regard to the role and composition of the Blue Cross-Blue Shield Advisory Committee, it was noted that the changing nature and scope of health insurance, generally, would suggest an expansion of this group's activities.

1) The Committee would suggest, therefore, that the present name be deleted and changed to reflect this expanded role; E.G., Health Insurance Committee.

2) As part of this reformation, the Committee recommends that the composition should be changed to be more representative of all specialties, according to the number of specialties in each category in the state.

3) The efforts of such a Committee cannot be representative unless each member faithfully attends meetings. For this reason, the Ad Hoc Committee strongly urges

anyone appointed to come to the meetings or not accept the appointment.

4) The Committee further recommends that the recommendations made with regard to Resolution Q be referred to the newly constituted committee for implementation.

I would urge the attention of the House of Delegates and its appreciation of the effort this report represents. The input of the Committee members, together with material from the open meeting and from other sources, resulted in a full airing of these issues, I feel. I would particularly like to express my thanks for their sincere and honest approach to a difficult task to: Carl Brueggemann, M.D., Covington; Glenn W. Bryant, M.D., Louisville; Kenneth P. Crawford, M.D., Louisville; Bennett L. Crowder, II, M.D., Hopkinsville; Harold D. Haller, M.D., Louisville; Ronald Hamilton, Jr., M.D., Lexington; Thomas Heavern, Jr., M.D., Highland Heights; Fred C. Rainey, M.D., Elizabethtown; Nelson B. Rue, M.D., Bowling Green; and Robert S. Tillett, M.D., Louisville.

I would like to personally thank the members of the staff of KMA who so ably assisted me throughout the entire undertaking of this difficult task. In particular, Mr. Robert Klinglesmith and Mr. William Applegate are to be commended for their timely advice and most welcome assistance in setting up and conducting the meetings, and especially in preparing this report.

James A. Baumgarten, M.D.  
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## Members in the news

### HONORS BESTOWED

Gradie R. Roundtree, M.D., professor of Occupational Medicine, University of Louisville, was awarded an Honorary Degree from Lincoln Memorial University, Tennessee. The award was given to Doctor Roundtree on June 2, for his 40 years of work in public health and medicine.

### IN MEMORIAM

**THEODORE R. DAVIES, M.D.**  
1904-1979  
Barbourville

Theodore R. Davies, M.D., Barbourville, died on June 7, 1979, at the Knox County General Hospital. Doctor Davies was a member of American Medical Association and the Kentucky Medical Association. He practiced medicine in the Barbourville area for 42 years.

**ELLIOTT PODOLL, M.D.**  
1919-1979  
Louisville

Elliott Podoll, M.D., Louisville, died July 1, in Key Biscayne, Fla. Doctor Podoll was a pediatrician in Louisville for nearly 25 years and past staff president at Children's Hospital. He was medical director at the Kentucky School for the Blind from 1949 to 1971 and a member of the American Medical Society and Kentucky Medical Association.

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### JULY

- 10 Journal Editors, Louisville
- 12 KPHA Annual Meeting, Owensboro
- 22-26 AMA Annual Meeting, Chicago

### AUGUST

- 8-9 Board of Trustees Meeting, Louisville
- 14 Journal Editors, Louisville

### SEPTEMBER

- 11 Journal Editors, Louisville
- 23-27 KMA ANNUAL MEETING



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I do want.  
I do think.  
I do feel.**

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<sup>1</sup>Please see BRIEF SUMMARY on following page.

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**Contraindications:** TRIDIHETHYL CHLORIDE: Allergic or idiosyncratic reactions to this or related compounds; glaucoma; obstructive uropathy (e.g., bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the G.I. tract (as in achalasia, paralytic ileus, pyloroduodenal stenosis, etc.); intestinal atony of the elderly or debilitated; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. MEPROBAMATE: Acute intermittent porphyria; allergic or idiosyncratic reactions to it or related compounds (carisoprodol, mebutamate, tybamate or carbromal).

**Warnings:** TRIDIHETHYL CHLORIDE: In high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Do not treat diarrhea associated with ileostomy or colostomy with this drug. If drowsiness or blurred vision occurs, warn the patient not to engage in activities requiring mental alertness (operating motor vehicles or machinery) or to perform hazardous work. MEPROBAMATE: *Drug dependence:* Physical and psychological dependence and abuse have occurred. Carefully supervise dose and amounts. Avoid prolonged use to alcoholics and those with known propensity for taking excessive quantities of drugs. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinations, and rare convulsive seizures more apt to occur in those with CNS damage or pre-existent or latent convulsive disorders). Withdrawal symptoms usually begin within 12-48 hours after drug stoppage and cease within the next 12 to 48 hours. Reduce excessive and prolonged dosage gradually over one or two weeks rather than stopping abruptly, or substitute a short-acting barbiturate, then gradually withdraw. *Potentially hazardous tasks:* (see above) *Additive Effects:* Meprobamate and alcohol, other CNS depressants, or psychotropic drugs may be additive; take appropriate precautions. *Pregnancy and Lactation:* Several studies indicate increased risk of congenital malformations with use of minor tranquilizers (meprobamate, chlorthalidoxepoxide, diazepam) during the first trimester of pregnancy. Avoid use of these drugs during this period. Consider possibility of pregnancy in a woman of childbearing potential at time of drug institution. If patient becomes pregnant during therapy with this drug, consult physician about desirability of discontinuing use of the drug. Meprobamate passes the placental barrier, is present in umbilical cord blood and breast milk of lactating mothers at concentrations two to four times that of maternal plasma; take in account in breast-feeding patients.

**Precautions:** TRIDIHETHYL CHLORIDE: Use with caution in autonomic neuropathy, hepatic or renal disease, early evidence of ileus, e.g., peritonitis, ulcerative colitis (large doses may suppress intestinal motility, thus producing a paralytic ileus; may precipitate or aggravate toxic megacolon), hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, hypertension, non-obstructing prostatic hypertrophy, hiatal hernia associated with reflux esophagitis. In the treatment of gastric ulcer may produce a delay in gastric emptying time (antral stasis). Do not rely on drug in complication of biliary tract disease. May increase heart rate in tachycardia. With overdosage, a curare-like action may occur. *Meprobamate:* To preclude oversedation, give the lowest effective dose to elderly and/or debilitated patients. Consider suicidal attempts and dispense the least amount of drug feasible at any one time. Use with caution in patients with compromised liver or kidney function to avoid excess accumulation. May precipitate seizures in epileptics.

**Adverse Reactions:** (Can occur with either component) TRIDIHETHYL CHLORIDE: (Physiologic or toxic, depending on patient response) xerostomia; urinary hesitancy and retention; tachycardia; palpitations; blurred vision; mydriasis; cycloplegia; increased ocular tension; loss of taste, headaches; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; decreased sweating; some degree of mental confusion and/or excitement especially in the elderly. MEPROBAMATE: *CNS:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impaired visual accommodation; euphoria, overstimulation; paradoxical excitement, fast EEG activity. *G.I.:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations; tachycardia, arrhythmias, transient ECG changes, syncope, hypotensive crises (one fatal case). *Allergic or Idiosyncratic:* (Usually seen during the first to fourth dose in those having no previous contact with the drug). Mild reactions are itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others include leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe (rare) include hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome, bullous dermatitis (one fatal case when given in combination with prednisolone). In case of such reactions, discontinue drug and initiate appropriate therapy (epinephrine, antihistamines, and in severe cases, corticosteroids). Consider allergy to excipients (furnished to physicians on request). *Hematologic:* (See also Allergic or Idiosyncratic) Agranulocytosis, aplastic anemia (rarely fatal). Thrombocytopenic purpura (rare). *Other:* Exacerbation of porphyric symptoms.

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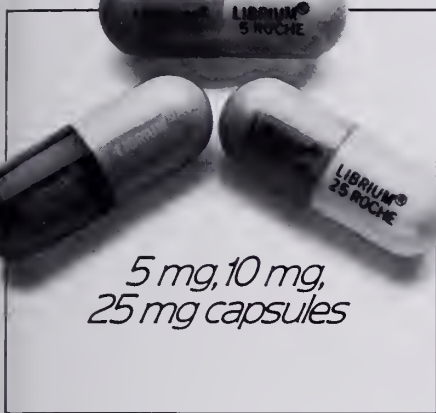
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**Warnings:** Warn patients that mental and/or physical abilities required for tasks such as driving or operating machinery may be impaired, as may be mental alertness in children, and that concomitant use with alcohol or CNS depressants may have an additive effect. Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and

acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

**Adverse Reactions:** Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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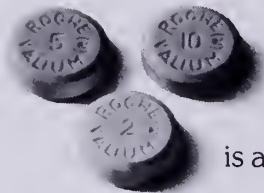
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**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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# MESSAGE FROM THE PRESIDENT

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Since this article will be printed in the September issue of the KMA Journal, it will be the last of my editorials as President of the KMA. The year has passed much too rapidly and our accomplishments seem few. Yet, when I reflect upon the activities of KMA during this past year, I feel that we have at least maintained the status quo and have assisted in some important programs—not the least of which has been cost containment.

I am also extremely proud of Kentucky medicine in giving to the AMA its 134th president, and the 8th from Kentucky, Hoyt Gardner, M.D., Louisville, Kentucky. I wish all of you could have been present in Chicago for his inauguration. I am sure that Hoyt and Rose will fulfill this year with pride and distinction.

Now what can we expect for the next year in KMA? First of all, Robert Howell, M.D., a classmate of mine, has had the valuable experience of being President of the Jefferson County Medical Society and will give us outstanding leadership during 1979-80.

Early in 1980 we will be facing another session of our State Legislature with its many bills which concern and effect medicine, either directly or indirectly. We know of many perennial issues which we must face again and these are anticipated. Others we will have to seek out from the many pieces of legislation which will be filed. Our office in Frankfort does an outstanding job.

As chairman of your Legislative Committee I have asked all Interspecialty Council Representatives to report any legislation regarding their specialty to check with the Legislative Committee for assistance.

On the national level, we still face continued governmental intervention into medical practice and the tremendous pressures of the FTC. Our ethics are under question and the rulings of the FTC threatens to downgrade the quality of medical care.

I cannot stress too greatly the importance of membership in the KMA and the AMA. Only through strength will we be able to combat the inroads of government. Your contributions to your Political Action Committee movements are essential for election of individuals to public office who support our views and are concerned with quality and quantity of medical care for all.

This year has brought to fruition the capitalization of the KMIC which will guarantee adequate malpractice insurance for most physicians in Kentucky—if they so desire. Congratulations to all those who have participated.

Since this is the end of our associational year, I wish to thank Mr. Bob Cox and his most excellent staff for all their consideration and guidance during this past year. I also thank all of you, officers and members, for your help and for the opportunity of serving as your president.

CARL COOPER JR., M.D.  
KMA President



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- 11-13 The Radiology of Multisystem Diseases\* Hyatt Regency Hotel, Lexington
- 17-18 Hypertension 1979\*\*
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- 24 20th Annual John Walker Moore Lecture,\*\* Health Sciences Center

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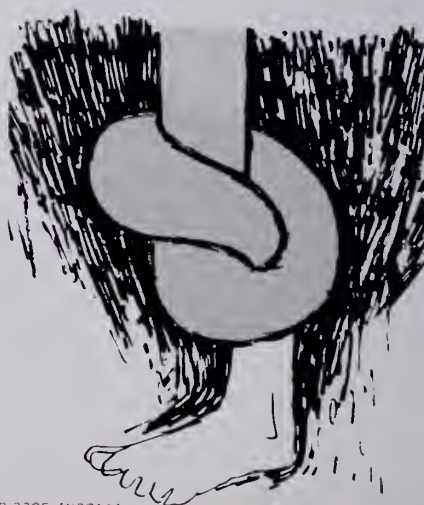
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# *The* JOURNAL *of the* Kentucky Medical Association

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## The Use of HLA-B27 in Rheumatic Diseases

**Richard A. Pascucci, D.O. and Norman A. Cummings, M.D.**

Louisville, Kentucky

Typing for tissue antigens has led to the discovery of a relationship between HLA-B27 and seronegative spondyloarthropathies. The prototypes of these arthropathies, ankylosing spondylitis and Reiter's syndrome, are described, and a rationale for practical use in ordering the B27 test in rheumatic diseases is presented.

**T**ISSUE typing for genetic matching of donors in renal transplantation has led to increased success in this field for a number of years. Histocompatibility typing also has given rise to interest in the relationship of these antigens to certain diseases, many of which are familial. In this paper, some of the concepts of tissue typing, the relation of these tissue antigens to rheumatic diseases, and the use of this information in aiding clinical diagnosis will be discussed. Most of the emphasis will be on the HLA-B27 antigen, and on a description of diseases related to this antigen. The practical aspects of how the HLA-B27 antigen can aid in diagnosis of these related rheumatic diseases will also be reviewed.

### Histocompatibility Typing

In the early 1900's workers realized that mouse tissue and tumors transplanted from related animals had less chance of rejection than those from dissimilar species. It was felt that certain

factors in dissimilar species stimulated rejection of transplanted tissue, and these factors were called histocompatibility antigens.<sup>1</sup> In 1954 Dausset noted surface antigens on the white blood cells in man analogous to those previously suspected to be present in the mouse. These antigens, which are polypeptides on the surface of almost every nucleated cell, were later called Human Leukocyte Antigens, or HLA.<sup>2</sup> There are five specific genes located on Chromosome #6, designated HLA-A, B, C, D and DR which code for these antigens. The antigens are assigned numbers according to the order in which they are described and their position on the specific gene. The International Histocompatibility Workshop recognizes newly discovered antigens, and assigns each a designated number. While awaiting international acceptance, the antigen will have the letter "W" (Workshop), preceding that number. For example, HLA-B27 was once known as HLA-W27, prior to international recognition. There have been 77 such antigens described to date and these can be serologically determined by a cytotoxic technique similar to blood typing, utilizing known collections of sera from multiparous or multiply-transfused patients.<sup>3</sup>

### Diseases Associated with HLA

Many diseases have been associated with various HLA antigens with differing frequencies. Table I lists some of these associations.<sup>4</sup> In addition, some of the rheumatic diseases were also found to have strong statistical association with various HLA antigens. (Table II)<sup>4,5,6</sup> These associations give further evidence for a possible genetic predisposition of many diseases which had long been suspected to be familial.<sup>7</sup>

*From the University of Louisville, Department of Medicine, Arthritis Center, Clinical Immunology and Connective Tissue Disease Section, Louisville, Ky.*



### HLA-B27 Related Arthritides

The major breakthrough in this area of immunogenetics occurred in 1973 when it was noted that over 90% of patients with Ankylosing spondylitis had HLA-B27 on their cells, in comparison to only 6-8% in the general white population. This disease is the prototype of a group of disorders which results in an inflammatory arthritis of the spine, called the seronegative spondylarthropathies. The group, in addition to ankylosing spondylitis, includes Reiter's syndrome, psoriatic spondylitis, enteropathic spondylitis (seen with ulcerative colitis and Crohn's disease) and Yersinia spondylitis. The occurrence of HLA-B27 in all of these disorders is greatly increased over the general population, as noted in Table III.<sup>8</sup> A better understanding of the clinical aspects of some of these disorders, most notably ankylosing spondylitis and Reiter's syndrome, is necessary before any discussion of the practical uses of histocompatibility typing can be applied to them.

Table I. Association of HLA Antigens with Some Diseases (Non-Rheumatic)

| Disease              | HLA Antigen | % Patients | % Controls |
|----------------------|-------------|------------|------------|
| Myasthenia Gravis    | B8          | 58         | 24         |
| Multiple Sclerosis   | DW2         | 57         | 24         |
| Juvenile Diabetes    | B8          | 43         | 24         |
|                      | DW3         | 50         | 21         |
| Graves Disease       | B8          | 42         | 24         |
| Addison's Disease    | B8          | 55         | 24         |
|                      | DW3         | 70         | 21         |
| Subacute Thyroiditis | BW35        | 72         | 13         |

### Ankylosing Spondylitis

Ankylosing spondylitis is an arthritis involving the sacroiliac joints and spine, and primarily affecting young males. The male to female ratio is 9:1 and peak age of onset is 20-29. The disease was at one time considered a subgroup of rheumatoid arthritis and was termed "rheumatoid spondylitis," but since 1963 it has been accepted as a distinct clinical entity. Some differentiating factors include lack of rheumatoid factor, (hence the term seronegative), lack of subcutaneous nodules, and lack of response to gold therapy. The pathology in these two diseases as well as the joint distribution also differs, and there is no increased incidence of HLA-B27 in rheumatoid arthritis. Clinically, the typical presentation of ankylosing spondylitis is that of a young male

Table II. Association of Rheumatic Diseases with HLA Antigens

| Disease                      | HLA Antigen | % Patients | % Controls |
|------------------------------|-------------|------------|------------|
| Systemic Lupus Erythematosus | B5          | 18         | 11         |
|                              | B8          | 40         | 24         |
|                              | DR-W2       | 57         | 26         |
|                              | DR-W3       | 46         | 22         |
| Sjögren's Syndrome           | B8          | 49         | 24         |
|                              | DW3         | 83         | 21         |
| Behcet's                     | B5          | 47         | 11         |
| Rheumatoid Arthritis         | DW4         | 40         | 9          |

with chronic low-back pain and stiffness which does not respond to the usual modes of therapy (muscle relaxants, hot packs, traction, etc.) Although a peripheral arthritis may occasionally be the initial manifestation, the sacroiliac joints are usually involved first. The inflammatory process then tends to migrate upward and may even affect the cervical spine in advanced disease. Paravertebral myospasms, alternating sciatica, and straightening of the lumbar loadosis may also be seen.

Iritis occurs in about one-fourth of these patients; amyloidosis is a late finding in some 8%. Cardiac involvement occurs in a small percentage of patients with prolonged disease and usually results in dilation of the valve ring and aortic insufficiency. Pulmonary manifestations may include apical fibrosis, bronchiectasis, or even cavity formation. There are no specific laboratory findings. The erythrocyte sedimentation rate may be elevated, and the rheumatoid factor is usually negative. The synovial fluid is usually of the inflammatory type, with complement at times disproportionately elevated above simultaneous serum complement. Radiographically, the sacroiliac joints may be blurred early in the disease,

Table III. Relation of HLA-B27 to Seronegative Spondylarthritides

| Disease                          | % Patients | % Controls |
|----------------------------------|------------|------------|
| Ankylosing Spondylitis           | 91         | 6-8%       |
| Reiter's Syndrome                | 79         | "          |
| Psoriasis                        | 8          | "          |
| with Peripheral Arthritis        | 13         | "          |
| with Spondylitis                 | 50         | "          |
| Enteropathic (Colitic) Arthritis |            |            |
| Peripheral                       | 8          | "          |
| Spondylitis or Sacroiliitis      | 83         | "          |
| Yersinia Arthritis               | 88         | "          |

with irregular areas of widening and sclerosis. A positive joint scan in this region may precede these findings. More advanced changes include squaring of the vertebrae, pelvic whiskering, and apophyseal joint erosion; chronic changes include the classical "bamboo spine" with sacroiliac joint fusion, ligamentous calcification, and symmetrical, marginal syndesmophytes, or bony bridges joining adjacent vertebrae.<sup>9</sup>

The differential diagnosis of ankylosing spondylitis is broad and encompasses a spectrum of disorders ranging from acute or chronic low back pain, to rare metabolic disorders such as ochronosis. Diagnosis in initial stages is most important, since early institution of drug therapy (e.g. indomethacin or phenylbutazone), physical therapy and patient education, may be associated with a better rehabilitation rate. Although this is a chronic disorder, 65% of patients are still gainfully employed 20 years following the diagnosis: a malignant course complicates only about 5%.<sup>10</sup>

### Reiter's Syndrome

Reiter's syndrome is a triad of non-gonococcal urethritis, conjunctivitis and arthritis, and may also include mucocutaneous ulcers, a genital rash (circinate balanitis) and a rash of palms and soles (keratoderma blenorrhagicum). The genital and palmar rashes may be histologically and clinically indistinguishable from the rash of pustular psoriasis.

This disease also primarily affects young men and usually follows urethritis, or a bout of severe dysentery, so that strong evidence exists for an infectious etiology. Sometimes only one or two of the classical triad occurs ("Incomplete Reiter's"), and this presents a difficult diagnostic challenge.

The arthritis of Reiter's syndrome most commonly involves the larger joints (knees, ankles or wrists) but may also affect fingers or toes, giving rise to the so-called "sausage digits." Calcaneal spurs or erosions, or plantar fasciitis can cause a painful heel, and sacroiliac joint involvement, which may well be asymmetrical, is present in approximately 50% of cases. Syndesmophytes, when present, tend to be large, non-marginal, and asymmetrical. Extra-articular manifestations may include conjunctivitis or iritis.

As in ankylosing spondylitis there is no true diagnostic test in this disease: the erythrocyte sedimentation rate may be elevated, the rheuma-

toid factor test is usually negative, and synovial fluid complement is elevated out of proportion to the serum.

Early radiographic changes may include osteoporosis and "fluffy" periostitis, while bony erosions are usually a late finding. While the joints of the lower extremities are most often involved, the spondylitis is also frequent.

The diseases considered in the differential diagnosis of ankylosing spondylitis must also be included here. In addition, gonococcal arthritis with urethritis, and psoriatic arthropathy, must be ruled out.

Management of this disorder is similar to that for ankylosing spondylitis. The prognosis is worse than formerly believed, since recent studies reveal a higher percentage of chronicity than originally thought.<sup>11</sup>

### Practical Application of HLA-B27 Typing

With these factors in mind, we can now consider some specific examples in which obtaining an HLA-B27 antigen may or may not be indicated.

A. A case of **definitely diagnosed ankylosing spondylitis**: the HLA-B27 should **not** be ordered. In such patients there would be classic radiologic features, typical clinical findings, and probably a response to physical therapy and to a drug such as phenylbutazone or indomethacin. The B27 would add no further to the regimen: the diagnosis has already been made.

B. A young patient with **sub-acute or chronic low back pain of unknown cause**: here the B27 may be helpful. The x-rays may be normal or show only equivocal changes in the sacroiliac joints. Some such patients may have been previously relegated to categories of uncertain diagnoses, such as occupationally related paraspinal myospasm. Women may not infrequently be referred to gynecologists for evaluation of uterine prolapse as a cause of back pain. However if the HLA-B27 antigen is present, the chances of a seronegative spondylarthropathy are immensely increased; the physician has some rationale for deciding on future radiologic monitoring of such patients, and perhaps exposing them to the risks of long term use of phenylbutazone or other drugs.

It is helpful to keep in mind the costs of these tests to the patient. Currently an HLA-B27 costs



about \$42.00 in this area; lumbosacral x-rays are approximately \$33.00, while radiologic studies of the entire spine would be \$85.00. A joint scan for evidence of sacroiliac inflammation costs about \$78.00. Therefore the B27 blood test is well within the range of other techniques for diagnosis, and may be instrumental in the judicious selection of further x-ray studies.

**C. An atypical case of peripheral arthritis:** an HLA-B27 may be indicated. Ankylosing spondylitis can present this way. In a young man with a pauciarticular arthritis, a family history of spondylitis, minimal backaches and a negative rheumatoid factor, that diagnosis (among others) must be considered. The presence of the B27 antigen would certainly add credence to the possibility of ankylosing spondylitis.

But more likely in such a case, even without backache or a positive family history, incomplete Reiter's syndrome must be considered. The mucocutaneous lesions may go unnoticed by the patient, or not be present; the synovial fluid can have a very inflammatory reaction with high complement levels; and infection must be ruled out. In these cases a sacroiliac joint scan is often positive (even without back symptoms), and the HLA-B27 helps confirm the diagnosis.

**D. The differential diagnosis of gonococcal arthritis and Reiter's syndrome** is sometimes clarified by an HLA-B27. The patient groups are similar in age, and sometimes in mode of presentation; the gonococcus is notoriously difficult to culture from a joint. Many studies are often necessary, including detailed synovial fluid analysis, antigonococcal antibodies, and occasionally even therapeutic trials. Normal synovial fluid glucose and elevated complement, negative fluorescent anti-gonococcal antibody, and a positive HLA-B27 help shift the diagnosis towards Reiter's syndrome.<sup>12</sup>

**E. As an aid in family counseling,** the HLA-B27, if already obtained, may be utilized to some extent. Some studies have shown that the HLA-B27 is present in about 50% of first degree re-

latives of HLA-B27 positive patients with ankylosing spondylitis. About one-fifth of these positive relatives develop ankylosing spondylitis. No such data exists for relatives of HLA-B27 positive Reiter's syndrome, although at least one study revealed a much higher incidence of ankylosing spondylitis in these positive relatives. These facts, however, are not yet well enough established to warrant the ordering of an HLA-B27 in a chronic case of ankylosing spondylitis, or in the case of an otherwise asymptomatic relative.<sup>12</sup>

**F. As a prognostic indicator,** the HLA-B27 still has only limited usefulness. It is felt that iritis may be seen less commonly during the course of HLA-B27 negative ankylosing spondylitis. Preliminary evidence also points to a milder course of Reiter's syndrome when the B27 is absent. However, there is not yet enough basis for ordering an HLA-B27 solely for prognostic purposes.<sup>12</sup>

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**FALL SCIENTIFIC MEETING**

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*the*  
*Kentucky Medical Association*

**TUESDAY, SEPTEMBER 25th**

Jeffersonian and Magnolia Rooms  
Ramada Bluegrass Convention Center

**12:00 Noon**     **Luncheon** for chapter members, officers,  
guests and candidates (limited to 60)

Assembly Hall  
Ramada Bluegrass Convention Center

**1:30**             ***"The Woman in the Case" - Robert Sparkman, M.D.***  
***A highly acclaimed talk about Jane Todd***  
***Crawford and Ephraim McDowell***

**2:30**             Intermission to View Exhibits

**3:00**             ***"Hepatic Injuries" - William Olsen, M.D.***

***"Scintiscans in Biliary Tract Disease" -***  
***Michael Ram, M.D.***

***"Ischemic Colitis after Aortic Reconstruction" -***  
***Pat Hagihara, M.D.***

***"Squamous Metaplasia of Lactiferous Glands" -***  
***Charles Sachatello, M.D.***



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# Management of Acetaminophen Overdose

Harry Carloss, M.D. and Frederick D. Austin, M.D.

Louisville, Kentucky

Acetaminophen is a widely used analgesic and antipyretic agent. Overdose may result in fatal hepatic necrosis. Clinical manifestations of toxicity are often nonspecific and slow in onset. Clinicians should be alerted to the potential danger of acetaminophen overdosage. Successful management of acetaminophen toxicity with N-acetylcysteine (Mucomyst<sup>R</sup>) is reviewed.

Acetaminophen is a widely used analgesic and antipyretic which is available in over-the-counter as well as prescription drugs. There are in excess of 250 drugs containing acetaminophen present in the United States today.<sup>1</sup> Reasons for the increasing popularity of acetaminophen include (1) its lack of gastrointestinal side effects; (2) its rapid absorption from the gastrointestinal tract; and (3) the absence of platelet function alteration associated with aspirin. The peak plasma level occurs in 30 to 60 minutes following ingestion, and the plasma half life is from one to three hours.

Overdosage with acetaminophen has been widely reported in the United Kingdom<sup>2,3</sup> and is being more frequently reported in the United States.<sup>4,5</sup> Acetaminophen may be used in suicidal gestures because of its widespread availability and the common misconception that it is harmless. In a survey of patients who had taken an overdose of acetaminophen the majority stated that if they had known the side effects or the delay of onset of symptoms, they would not have taken the drug.<sup>6</sup>

The primary side effect of acetaminophen toxicity is hepatic necrosis which may lead to hepatic encephalopathy and death. Clinical manifestations of acetaminophen toxicity are usually nonspecific and include nausea, vomiting, anorexia, and abdominal tenderness. Initially there is

no evidence of central nervous system depression, and the presence of coma suggests concomitant ingestion of other drugs. In the first 12 to 24 hours after overdosage with acetaminophen, liver function studies are normal; however hepatic enzymes, serum bilirubin and prothrombin time usually become elevated on the second through fifth day. Liver function studies (SGOT, SGPT, bilirubin and prothrombin time) should be repeated every 24 hours for the four days immediately following ingestion. Under normal situations of acetaminophen metabolism, metabolites combine with hepatic glutathione. In overdosage the glutathione stores become depleted and these metabolites form covalent bonds with hepatic cell walls thus causing hepatic necrosis. Liver biopsy after acetaminophen overdosage shows central lobular necrosis with reticulum collapse. In patients who recover from the hepatotoxicity there is no evidence of residual liver damage.

The reported lethal dose in adults varies widely but acetaminophen toxicity is rarely seen in acute overdoses of less than ten grams and fatalities are uncommon under fifteen grams. Acetaminophen overdose is usually not a problem in children under five, perhaps because of differences in the way children metabolize acetaminophen. Recently, however, the death of a three-year-old child after ingestion of five grams of acetaminophen was reported.<sup>7</sup>

Rapid action is necessary when there is a history of acetaminophen overdose. If serum levels are not readily available, the physician must act on history alone. A large bore gastric tube should be inserted and gastric lavage attempted. Acetaminophen is rapidly absorbed under normal circumstances but when a large number of tablets are ingested delayed absorption may occur. Intravenous fluids should be started especially if combination drugs such as Darvocet<sup>®</sup> are ingested.

Many treatments to prevent hepatic damage have been reported. These include hemoperfusion through charcoal filters,<sup>8</sup> propranolol,<sup>9</sup> cysteamine,<sup>10</sup> methionine,<sup>11</sup> and N-acetylcysteine.<sup>4,12</sup>

*From the Medical Service, Veterans Administration Hospital, Louisville, Ky.*



Cysteamine, methionine and N-acetylcysteine have been shown to be superior to supportive care alone.<sup>4</sup>N-acetylcysteine (Mucomyst®) has the advantage of oral administration and longer stability and effectiveness following acetaminophen overdose. It has glutathione like properties and seems to act as an immediate precursor of glutathione or as a glutathione substitute.

N-acetylcysteine (Mucomyst®) is administered orally with cola or juice to make it approximately isotonic and more palatable. If oral administration is not possible, it should be given by duodenal intubation. The initial dose is 140 mg/kg followed by 70 mg/kg every four hours for three days. It is available in 20% solution in 30 cc vials. Each 30 cc vial contains six grams of N-acetylcysteine (Mucomyst®). Each gram should be mixed with 15 ml of dilutant. The mixture should be administered within one hour of preparation.

Treatment should begin as soon as possible because of the rapid metabolism of acetaminophen. Side effects of treatment include nausea and diarrhea, but no serious side effects have been reported.

The use of N-acetylcysteine (Mucomyst®) as an antidote has not yet received approval of the Food and Drug Administration except as an investigational drug. Informed consent, therefore, must be obtained. Further information on this treatment can be obtained by calling the Rocky

Mountain Poison Center's toll-free number, 800-525-6115.

In summary, acetaminophen is an effective drug when properly used. When overdose occurs, it must be recognized and treated promptly to avoid fatal hepatic necrosis. The most effective treatment is N-acetylcysteine (Mucomyst®) which is widely available and has no reported serious side effects.

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## MANUSCRIPT INFORMATION

*Manuscripts will be accepted for consideration with the understanding that they are original and are contributed solely to The Journal. They should be submitted in duplicate, typed with double spacing, and should usually not exceed 2,000 words in length. The transmittal letter should designate one author as correspondent and include his complete address and telephone number.*

*In addition, in view of The Copyright Revision Act of 1976, effective January 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of The Journal Of The Kentucky Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to The Journal in the event that such work is published by The Journal.*

*A synopsis-abstract must accompany each manuscript. The synopsis should be a factual (not descriptive) summary of the work and should contain: 1) a brief statement of the paper's purpose, 2) the approach used, 3) the material studied, and 4) the results obtained. The synopsis should*

*be able to stand alone and not merely duplicate the conclusions.*

*References should be cited consecutively in the text and should contain, in order, the author, title of article, source, volume, inclusive page numbers, year. Journal abbreviations should conform to the Index Medicus. The Journal of KMA does not assume responsibility for the accuracy of references used with scientific articles.*

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A reminder

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- reduces risk of uric acid lithiasis

**INDICATIONS AND USE:** This is not an innocuous drug and strict attention should be given to the indications for its use. Pending further investigation, its use in other hyperuricemic states is not indicated at this time.

Zyloprim<sup>®</sup> (allopurinol) is intended for:

1. treatment of gout, either primary, or secondary to the hyperuricemia associated with blood dyscrasias and their therapy;
2. treatment of primary or secondary uric acid nephropathy, with or without accompanying symptoms of gout;
3. treatment of patients with recurrent uric acid stone formation;
4. prophylactic treatment to prevent tissue urate deposition, renal calculi, or uric acid nephropathy in patients with leukemias, lymphomas and malignancies who are receiving cancer chemotherapy with its resultant elevating effect on serum uric acid levels.

**CONTRAINDICATIONS:** Use in children with the exception of those with hyperuricemia secondary to malignancy. The drug should not be employed in nursing mothers.

**Patients who have developed a severe reaction to Zyloprim should not be restarted on the drug.**

**WARNINGS:** ZYLOPRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION. In some instances a skin rash may be followed by more severe hypersensitivity reactions such as exfoliative, urticarial and purpuric lesions as well as Stevens-Johnson syndrome (erythema multiforme) and very rarely a generalized vasculitis which may lead to irreversible hepatotoxicity and death.

A few cases of reversible clinical hepatotoxicity have been noted and in some patients asymptomatic rises in serum alkaline phosphatase or serum transaminase have been observed. Accordingly, periodic liver function tests should be performed during the early stages of therapy, particularly in patients with pre-existing liver disease. Patients should be alerted to the need for due precautions when engaging in activities where alertness is mandatory.

Nevertheless, iron salts should not be given simultaneously with Zyloprim. This drug should not be administered to immediate relatives of patients with idiopathic hemochromatosis.

In patients receiving Purinethol<sup>®</sup> (mercaptopurine) or Imuran<sup>®</sup> (azathioprine), the concomitant administration of 300-600 mg of Zyloprim per day will require a reduction in dose to approximately one-third to one-fourth of the usual dose of mercaptopurine or azathioprine. Subsequent adjustment of doses of Purinethol or Imuran should be made on the basis of therapeutic response and any toxic effects.

**Usage in Pregnancy and Women of Childbearing Age.** Zyloprim<sup>®</sup> (allopurinol) should be used in pregnant women or women of childbearing age only if the potential benefits to the patient are weighed against the possible risk to the fetus.

**PRECAUTIONS:** Some investigators have reported an increase in acute attacks of gout during the early stages of allopurinol administration, even when normal or sub-normal serum uric acid levels have been attained.

It has been reported that allopurinol prolongs the half-life of the anticoagulant, dicumarol. This interaction should be kept in mind when allopurinol is given to patients already on anticoagulant therapy, and the coagulation time should be reassessed.

A fluid intake sufficient to yield a daily urinary output of at least 2 liters and the maintenance of a neutral or, preferably, slightly alkaline urine are desirable to (1) avoid the theoretic possibility of formation of xanthine calculi under the influence of Zyloprim therapy and (2) help prevent renal precipitation of urates in patients receiving concomitant uricosuric agents.

Patients with impaired renal function require less drug and should be carefully observed during the early stages of Zyloprim administration and the drug withdrawn if increased abnormalities in renal function appear.

In patients with severely impaired renal function, or decreased urate clearance, the half-life of oxipurinol in the plasma is greatly prolonged. Therefore, a dose of 100 mg per day or 300 mg twice a week, or perhaps less, may be sufficient to maintain adequate xanthine oxidase inhibition to reduce serum urate levels. Such patients should be treated with the lowest effective dose, in order to minimize side effects.

Mild reticulocytosis has appeared in some patients.

As with all new agents, periodic determination of liver and kidney function and complete blood counts should be performed especially during the first few months of therapy.

### ADVERSE REACTIONS:

**Dermatologic:** Because in some instances skin rash has been followed by severe hypersensitivity reactions, it is recommended that therapy be discontinued at the first sign of rash or other adverse reaction (see WARNINGS). Skin rash, usually maculopapular, is the adverse reaction most commonly reported.

Exfoliative, urticarial and purpuric lesions, Stevens-Johnson syndrome (erythema multiforme) and toxic epidermal necrolysis have also been reported.

A few cases of alopecia with and without accompanying dermatitis have been reported.

In some patients with a rash, restarting Zyloprim (allopurinol) therapy at lower doses has been accomplished without untoward incident.

**Gastrointestinal:** Nausea, vomiting, diarrhea, and intermittent abdominal pain have been reported.

**Vascular:** There have been rare instances of a generalized hypersensitivity vasculitis or necrotizing angiitis which have led to irreversible hepatotoxicity and death.

**Hematopoietic:** Agranulocytosis, anemia, aplastic anemia, bone marrow depression, leukopenia, pancytopenia and thrombocytopenia have been reported in patients, most of whom received concomitant drugs with potential for causing these reactions. Zyloprim<sup>®</sup> (allopurinol) has been neither implicated nor excluded as a cause of these reactions.

**Neurologic:** There have been a few reports of peripheral neuritis occurring while patients were taking Zyloprim. Drowsiness has also been reported in a few patients.

**Ophthalmic:** There have been a few reports of cataracts found in patients receiving Zyloprim. It is not known if the cataracts predated the Zyloprim therapy. "Toxic" cataracts were reported in one patient who also received an anti-inflammatory agent; again, the time of onset is unknown. In a group of patients followed by Gutman and Yü for up to five years on Zyloprim therapy, no evidence of ophthalmologic effect attributable to Zyloprim was reported.

**Drug Idiosyncrasy:** Symptoms suggestive of drug idiosyncrasy have been reported in a few patients. This was characterized by fever, chills, leukopenia or leukocytosis, eosinophilia, arthralgias, skin rash, pruritus, nausea and vomiting.

**OVERDOSAGE:** Massive overdosing, or acute poisoning, by Zyloprim has not been reported.

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# A Clinical Approach to the Choice of Antimicrobial Agents, Case Number 9: Pneumococcal Meningitis

Julio C. Melo, M.D. and Martin J. Raff, M.D.

Louisville, Kentucky

This is the ninth in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choices of antimicrobial agents and explanations of why the authors choose one as the best agent.

A 68-year-old alcoholic white male from Louisville, Kentucky is brought to the hospital after being found unconscious in his apartment. On physical examination he is responsive to external stimuli but does not follow verbal commands. Temperature is 102.8° F; BP 100/60 mm Hg; pulse, 120/min; respirations, 32/min. He has no signs of head trauma; pupils are isocoric and react to light; ophthalmoscopic examination is normal; tympanic membranes are clear. Poor oral hygiene is present with partial edentia, multiple caries, periodontitis and pyorrhea; the throat is not congested; mild nuchal rigidity is noted. The lungs reveal no signs of consolidation; the heart is normal in size with a regular rhythm. An S4 gallop is present but there are no murmurs or rubs. The abdomen is distended; shifting dullness and a fluid wave are demonstrable; testes are atrophic. The extremities show no signs of trauma; there are no paresthesias; deep tendon reflexes are 4+; Babinski's sign is present bilaterally.

Laboratory data reveal a hematocrit of 36.8% and WBC count of 9,800/mm<sup>3</sup> with 70% neutrophils, 15% bands, and 15% lymphocytes. Urinalysis shows a specific gravity of 1.026, pH 5.5, protein 2+, glucose negative, 0-1 RBC/HPF,

0-1 WBC/HPF, and no casts. ECG shows sinus tachycardia at 120/min., and chest x-ray is normal. Paracentesis reveals cloudy fluid with a WBC count of 890/mm<sup>3</sup>, of which 80% are neutrophils and 20% lymphocytes. Gram stain reveals many WBC and gram positive diplococci.

Lumbar puncture yields turbid cerebrospinal fluid under a pressure of 360 mm H<sub>2</sub>O. Total protein is 68 mg/dl, glucose 32 mg/dl (concomitant serum glucose 118 mg/dl) and WBC count 1180/mm<sup>3</sup>, of which 98% are neutrophils. Gram stain reveals gram-positive cocci in pairs. After material for cultures has been obtained, your drug of choice is:

- A. Chloramphenicol, 1 gram IV q 6h.
- B. Penicillin G, 20 million units intravenous-ly/24h.
- C. Cephalothin (Keflin®), 1 gram IV q 6h.
- D. Tetracycline, 500 mg IV q 6h.
- E. Clindamycin (Cleocin®), 450mg IV q 4h.

**Answer: B. High dose intravenous penicillin.**

*Streptococcus pneumoniae* is isolated from his blood, ascites, and cerebrospinal fluid. This patient presents with the syndrome of spontaneous bacterial peritonitis<sup>1</sup>, bacteremia, and meningitis due to *S. pneumoniae*. Penicillin G is still the drug of choice for pneumococcal infection. Chloramphenicol would have been an adequate choice if this patient had been allergic to penicillin. Cephalothin (Keflin®), although active against *S. pneumoniae*, should not be used to treat patients with meningitis because therapeutically effective concentrations of the active compound are not achievable in the subarachnoid space. Tetracycline should not be used to treat infections due to *S. pneumoniae* since up to 30% of these organisms are resistant to this compound, and its penetration into the central nervous system is not very good. Clindamycin does not penetrate into the CSF and should not be used to treat meningeal infections.

*From the Section of Infectious Diseases, Department of Medicine, The University of Louisville School of Medicine, P.O. Box 35260, Louisville, KY 40232.*



Five days following institution of penicillin therapy the patient is doing very well. Due to the excellent clinical response the intravenous penicillin is discontinued and the patient is started on phenoxymethyl penicillin, 500 mg p.o. q 4h. The patient continues to do well for two more days but on the 8th day spikes a temperature to 104°F and becomes confused and agitated. A repeat paracentesis yields 10 cc of clear fluid with 10 WBC/mm<sup>3</sup>, all lymphocytes, and the gram stain is negative. A repeat lumbar puncture shows an opening pressure of 200 mm H<sub>2</sub>O, 600 WBC/mm<sup>3</sup> of which 60% are neutrophils, glucose of 40 mg/dl, and protein 50 mg/dl. Gram stain reveals gram-positive diplococci.

At this time you would discontinue oral penicillin and:

- A. Start chloramphenicol, 1 gram IV q 6h.
- B. Start nafcillin, 2 grams IV q 4h.
- C. Restart IV penicillin, 20 million units/24 hours
- D. Restart IV penicillin, 20 million units/24 hours and also inject 10,000 units of penicillin G intrathecally every 24 hours.
- E. Start vancomycin, 500 mg IV q 6h.

**Answer: C. Resume high dose intravenous penicillin.**

Not infrequently, patients with pneumococcal meningitis improve extremely rapidly on adequate doses of penicillin. Penicillin enters the subarachnoid space well through inflamed meninges and achieves quite adequate levels in the CSF if given in sufficiently high doses. However, as the meningeal inflammation decreases, so does the degree of penetration of penicillin G into the subarachnoid space. For this reason, treatment with high doses of penicillin G (20 million units/24 hours) is recommended for the total duration of therapy (usually about 14 days), despite rapid clinical

improvement. Chloramphenicol once again is the drug of choice for patients with pneumococcal meningitis who are allergic to penicillin. Nafcillin, a penicillinase-resistant semisynthetic penicillin derivative, would have been the drug of choice had the organism been *Staphylococcus aureus*.

There is no need to inject penicillin G intrathecally, since adequate intravenous doses of penicillin yield bactericidal levels in the CSF. This relapse of pneumococcal meningitis should not usually be interpreted as representing meningitis due to a multiply-resistant organism.<sup>2</sup> However, reports of relapsing pneumococcal meningitis due to relatively penicillin-resistant *S. pneumoniae* have already been reported in this country.<sup>1,3,4</sup> Depending on the particular clinical situation and the geographic location of the patient, the physician may need to request sensitivities for the clinical isolates of *S. pneumoniae*.<sup>5,6</sup> Recently three strains of *S. pneumoniae* with moderately increased resistance to penicillin were reported from Pittsburgh, Pennsylvania.<sup>6</sup> One of these was from a child with meningitis. These authors suggest that routine monitoring for penicillin resistance of pneumococci be performed on all isolates. This does not yet appear to be a problem in Kentucky.

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Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.



## EDITORIAL

### The 129th Annual Meeting September 25-27

Every doctor in Kentucky should become aware, even if he has not the slightest interest, that the Annual Meeting of the Kentucky Medical Association sets a brilliant example of success to the other states. That other states send delegates to our meeting to observe our methods causes us naturally to wonder, "What are we doing right?"

And we speculate: Kentuckians love Kentucky; Kentucky doctors frequently disagree with but love the company of Kentucky doctors; the KMA is not the isolated hobby of a political few, it is the concerned, involved participation of the majority trying to evolve a consensus.

One of the most important things we are doing right is the distillation of a KMA staff who work with devotion, imagination and loyalty to facilitate and accelerate the work of the KMA. The amount of their involvement and industry is not obvious during the convention because the meeting is seemingly effortless while it is productive and fun.

To other state associations who observe and consult us, Bob Cox, KMA's Executive Vice President, offers this recipe for success.

The KMA presents its Annual Meeting with pride . . .

A E O

### The KMA Annual Meeting A Recipe For Success

As September rolls around, most Kentucky physicians' thoughts and plans turn to the KMA Annual Meeting which will be held this year at the Ramada Inn in Louisville September 25-27. We hope it is included in your plans.

The KMA presents its annual meeting with pride as our medical convention is known nationally to be perhaps the very best in state association meetings. Every Kentucky physician should share in that pride and in the convention festivities, for there is truly something significant daily for everyone.

We are unique in that historically we register approximately 50% of our membership at the annual meeting while the national average is estimated somewhere below 10%. We operate a full technical exhibit hall (with a waiting list) while others have lost their exhibit hall entirely. We coordinate half-day sessions of specialty groups to not conflict with general sessions since we generally have a strong interest in both.

Next, we delicately stir a mixture of business sessions of the Executive Committee, Board of Trustees, reference committees and House of Delegates with class reunions, Auxiliary functions, KEMPAC, and a pinch of our own professional liability insurance company. We add some evening social events, the President's Luncheon, and a reception with time on your own for meeting old friends and making new ones. We then cover this with a strong effort to serve you the best speakers on timely subjects from throughout our nation for your continuing education. The result is another KMA Annual Meeting you are sure to enjoy.

While some of the business sessions begin as early as Saturday, September 22, most of us can count on September 25-27 for a full scientific program, business highlights, and social activities. We have blended together the ingredients we think will suit your taste. We hope to see you in Louisville.



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## Lymph Node Biopsy

Lymph node biopsies present unique problems to the pathologist, diagnostician and oncologist. In no other area of pathology is the diagnosis so predicated on the microscopic analysis of tissue sections alone, without benefit of distinct clinical manifestations and other laboratory tests. Both the pattern of change and the cytologic characteristics must be studied in order to categorize the problem and institute therapy. This article will review the steps necessary to best achieve the optimum preparation for this evaluation. The rationale, some pitfalls, and corrective procedures will be presented. Where a pathologist is not present on a full-time basis, these procedures can be performed by laboratory personnel. Essentially, I am suggesting a protocol for quality control related to the diagnosis of lymph node diseases.

Selection of the appropriate lymph node for biopsy is of great importance. Inguinal lymph nodes, although accessible, often show chronic inflammatory changes and fibrosis which obscure interpretation of any other pathologic process present. In the presence of generalized lymphadenopathy, the surgeon should biopsy deep cervical nodes, which are more likely to be diagnostic than superficial nodes. Superficial lymph nodes may show only reactive changes whereas deeper nodes may show a neoplasm.

There are very few circumstances that warrant a frozen section on a lymph node. Freezing a lymph node will produce enough distortion and artifact that it may be impossible to make a diagnosis from permanent sections. The lymph node tissue should arrive in the laboratory from surgery fresh and uncut, and in a quantity of saline sufficient to insure that there will be no drying of tissue. A dry sponge is unsatisfactory. Moisture prevents drying artifact which makes it difficult to see cellular detail microscopically. Upon arrival in the laboratory immediate sectioning of the intact lymph node should be performed. The lymph node is to be cut across the long axis in 3 mm intervals.

The poles of the lymph node are to be used for cultures, immunologic studies, impression smears, and electron microscopy. After sectioning the node one of the ends is lightly touched to an absorbent surface to remove excess fluid and then lightly touched to the surface of each of six numbered slides with multiple sequential touches on each slide. This is important because some of the larger cells and more adherent cells come off only on the last slides. These imprints have advantages for cytologic purposes in that the cells are not distorted, allow precise identification of different types of lymphoma, allow separation from anaplastic carcinoma, and can be used for rapid diagnosis by experienced pathologists. These slides are air dried and some should be stained with Wright's stain. The ends are then placed in a separate Petri dish, labeled, and sent to the microbiology section of the laboratory for culture for acid-fast organisms and fungi.

The majority of the central portion of the node should then be placed in abundant fixative. It is necessary to section the node prior to placing in fixative because the capsule of the node retards penetration and the central portion of the node will undergo autolysis while the subcapsular zone fixes. Fixation is the most important step in the preparation of histologic slides. All the steps subsequent to fixation can be repeated and corrected but nothing can restore them if not fixed properly. The majority of the problems associated with technically poor lymph node slides relate to poor fixation. A 10% buffered formalin solution is universally used and is adequate, but a fixative "B5"—a formalin-mercuric chloride mixture made nearly neutral with sodium acetate—is an excellent fixative for this purpose. A 3 mm thick block of tissue requires only four hours fixation versus 24 hours for formalin alone.

Ultimately the complete diagnosis of a lymph node problem requires a coordinated examination of well prepared lymph nodes and lymph node touch preparations, bone marrow aspirates, and peripheral blood findings by the pathologist.



All the procedures described above should be followed and the pathologist should develop criteria for the diagnosis of specific lymph node disorders which are generally acceptable and specifically adhered to in the laboratory. The pathologist should also have a reference system to be able to compare the case in question with classic cases so that each time a diagnosis is made the criteria are reviewed.

Lymph node biopsy diagnosis is difficult even with excellently prepared and processed tissue. It is very important that meticulous attention to detail be paid at every step of the procedure from the selection of the biopsy site to the diagnosis so that all the data can be collated to make a diagnosis.

LOUIS D. DUBILIER, M.D.

Physician needed for a medical center serving the needs of 20,000 employees at a major appliance manufacturing facility in Louisville, Kentucky. Experience in trauma would be helpful. Clinic fully staffed and equipped including Coronary Care Unit, X-ray and Physiotherapy Sections. Duties will involve care of occupational injuries, illness, health evaluations and involvement in the basic objectives of occupational health. Forty-hour work week. No nights or weekends. Occupational program has full management support and this challenging position can lead to advancement within the General Electric Company.

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**Tenuate®**

(diethylpropion hydrochloride NF)

**Tenuate Dospan®**

(diethylpropion hydrochloride NF) controlled-release

AVAILABLE ONLY ON PRESCRIPTION

#### Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychological dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache; rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSEAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid-evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg tablet daily, swallowed whole, in mid-morning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

MERRELL-NATIONAL LABORATORIES Inc.  
Cayey, Puerto Rico 00633

Direct Medical Inquiries to:

MERRELL-NATIONAL LABORATORIES  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215, U.S.A.

Licensor of Merrell®

References: 1. Citations available on request from Medical Research Department, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon [Dillon], R.H., and Leyland, H.M. A comprehensive review of diethylpropion hydrochloride. In: *Central Mechanisms of Anorectic Drugs*, S. Garattini and R. Samanin, Ed., New York, Raven Press, 1978, pp. 391-404.

**Merrell**

**Overweight may not always be simple...  
complications can develop\*.  
Complicated or not...**

# **Tenuate<sup>®</sup> Dospan<sup>®</sup> <sup>IV</sup>** **(diethylpropion hydrochloride NF)** **75 mg. controlled-release tablets**

## **A useful short-term adjunct in an indicated weight loss program.**

Overweight patients in certain diagnostic categories often require strict appetite control and a successful program of weight reduction may tend to diminish the incidence or severity of the complications in some patients. Diethylpropion hydrochloride has been reported useful in such patients and while it is not suggested that Tenuate itself in any way reduces the complications of overweight, it may have a useful place as a short-term adjunct in a prescribed dietary regimen. **Tenuate should not be administered to patients with severe hypertension; see additional Warnings and Precautions on the opposite page.**

## **In uncomplicated overweight.**

Many patients, on the other hand, present with excess fat but no disease. While this condition is often termed uncomplicated obesity, complications of both a social and a psychologic nature may be distressingly real for the patients. In these cases, a short-term regimen of Tenuate can help reinforce your dietary counsel during the important early weeks of an indicated weight loss program.

## **Clinical effectiveness.**

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 16 separate double-blind, placebo-controlled studies attest to its usefulness in daily practice.<sup>1</sup> And the unique chemistry of Tenuate provides "...anorectic potency with minimal overt central nervous system or cardiovascular stimulation."<sup>2</sup> Compared with the amphetamines, diethylpropion has minimal potential for abuse.

**Tenuate—it makes sense.  
And it's responsible medicine.**

\*Studies have shown that obesity is associated with an increased incidence of hypertension, symptomatic heart disease, adult-onset diabetes, and other diseases.

# **Merrell**



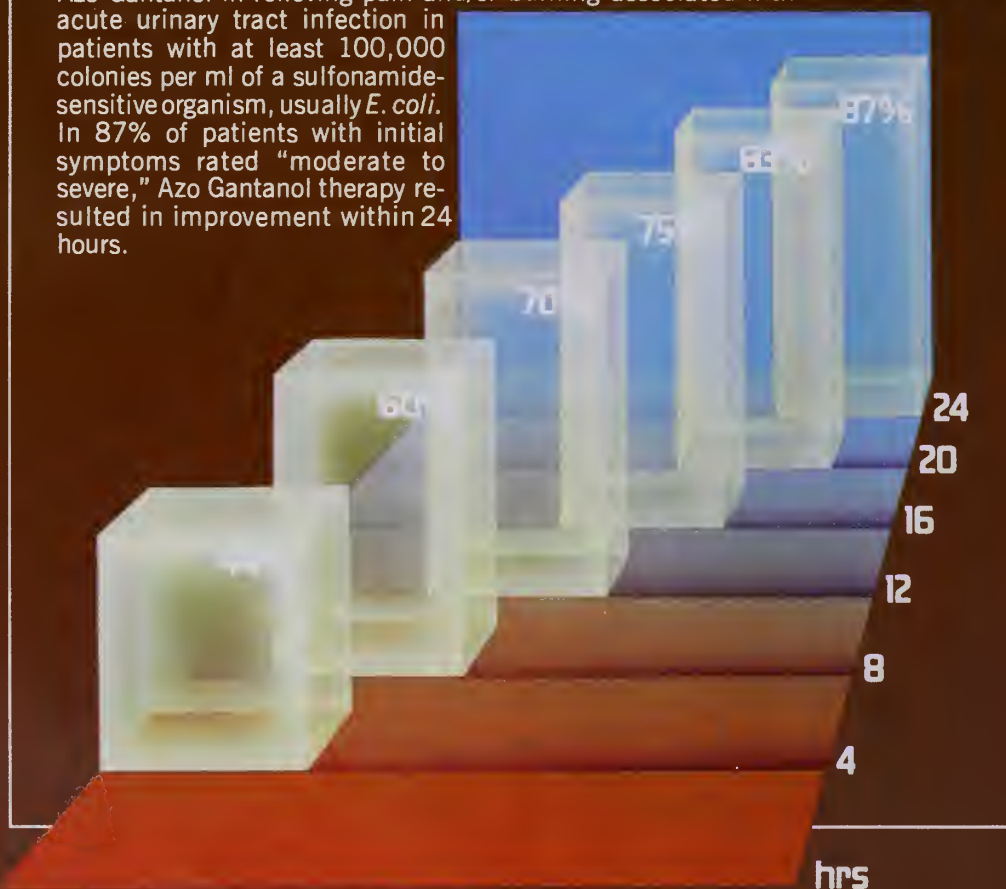
For prescribing information see opposite page



## Important data on the pain of acute cystitis:

# In 87% of patients studied (303 of 349), Azo Gantanol® reduced pain and/or burning within 24 hours\*

A controlled, multicenter study assessed the efficacy of Azo Gantanol in relieving pain and/or burning associated with acute urinary tract infection in patients with at least 100,000 colonies per ml of a sulfonamide-sensitive organism, usually *E. coli*. In 87% of patients with initial symptoms rated "moderate to severe," Azo Gantanol therapy resulted in improvement within 24 hours.



Fast pain relief plus effective antibacterial action

# Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for  
the pain

for  
the pathogens

\*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110.

Before prescribing, please consult complete product information, a summary of which follows.  
**Indications:** In adults, urinary tract infection complicated by pain (primarily pyelonephritis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. Not to be used in patients who are unable to fully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Sulfonamide resistance may occur. Sulfonamide aminobenzoic acid to follow-up culture may be necessary. The usefulness of antibacterials including sulfonamides. Measure sulfonamide blood levels. Variations may occur; 20 mg/100 ml shows maximum total level.

**Contraindications:** Children below age 12; sulfonamide hypersensitivity; pregnancy at term; during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hematuria, and pyelonephritis of pregnancy disturbances.

**Warnings:** Safety during pregnancy not established. Deaths from hypersensitivity reactions, aplastic anemia and other blood disorders have been reported and early clinical signs (throat, fever, pallor, purpura or jaundice) indicate serious blood disorders. Frequent urinalysis with microscopic examination recommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, severe bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalline stone formation.

**Adverse Reactions:** Blood dyscrasias (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, thrombinemia and methemoglobinemia); skin reactions (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrosis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, peripheral edema, conjunctival and scleral injection, sensitization, arthralgia and allergic myalgia); *G.I. reactions* (nausea, emesis, abdominal pain, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis); *CNS reactions* (headache, dizziness, neuritis, mental depression, convulsions, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, nephrosis with oliguria and anuria, pericarditis, nodosa and L. E. phenomenon). Due to chemical similarities with some goitrogens, uretics (acetazolamide, thiazides) and hypoglycemic agents, sulfonamides have caused instances of goiter production, diuresis, and glycemia. Cross-sensitivity with these agents may exist.

**Dosage:** Azo Gantanol is intended for the treatment of the painful phase of urinary tract infection. **Adult dosage:** 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be considered. After relief of pain has been obtained, treatment with Gantanol (sulfamethoxazole) should be considered.

**NOTE:** Patients should be told that the dye (phenazopyridine HCl) will color the urine red. **Supplied:** Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.



Roche Laboratories  
Division of Hoffmann-La Roche  
Nutley, New Jersey 07110

# Report From KMA Cancer Committee—

## Nutritional Support Of Cancer Patients Is It Worth It?

In the past few years a sizeable increase in the funding allocated to nutrition research by Federal Agencies has occurred. Particularly noticeable is the funding allocated by the National Cancer Institute Branch of the National Institute of Health to support the Diet Nutrition and Cancer Program. While this program will in part support studies in the field of diet and carcinogenesis, the main emphasis appears to be directed to determine the role of nutritional support in the therapeutic and rehabilitation management of cancer patients.

The goals of this NCI Program raise the following questions:

1. Is malnutrition a common occurrence in cancer patients?
2. If so, can malnourished cancer patients benefit from an improvement in their nutritional status?

The first question is only a rhetorical one for any oncologist. It is rather obvious that food intake, digestion and/or absorption will be impaired in patients with head and neck or gastrointestinal tumors. In addition to the direct effect of the neoplasm, the specific antineoplastic therapy induces nausea, vomiting, diarrhea and organic alterations of the gastrointestinal tract, which will further impair the nutritional balance of the patient. In addition, a large percentage of neoplastic diseases is accompanied by a complex syndrome characterised by anorexia, marked weight loss, and wastage of body components which is not dependent on the location of the neoplasm; as the disease progresses the patient becomes cachectic and eventually dies for what appears to be a severe state of malnutrition, rather than a direct consequence of the neoplastic lesion per se.

If the occurrence of malnutrition among can-

cer patients is a recognized possibility, some skepticism may exist about the benefits of an energetic schedule of nutritional replenishment of such patients.

The techniques to deliver adequate nutritional support are being progressively simplified and their side effects such as infection and patient discomfort, minimized. Numerous reports indicate weight gain and improved quality of life of cancer patients undergoing appropriate regimen of nutritional replenishment.

Still, however, several questions remain. In particular it has not yet been determined if proper nutritional support can counteract the adverse effects of chemo and radiotherapy, or if it will improve the efficacy of these treatments. A cost benefit analysis of this additional treatment is also not yet available and it would be highly desirable, considering the rather high price tag attached to it.

As it is the ethical obligation of the medical profession to provide adequate nutrition to every patient, the effort of the federal agencies to encourage the study of the nutritional requirements of cancer patients, ways of meeting them and the influence of appropriate nutrition management on the overall outcome of the antineoplastic therapy, is fully justified and long needed.

Until the Diet Nutrition and Cancer Program of the NCI provides satisfactory answers to all the questions still remaining, the available data already indicate that nutritional supplementation can and should be used whenever a malnourished cancer patient is considered for any kind of antineoplastic therapy.

In fact the following considerations should be made: 1. Nutritional supplementation per se has never been reported to have any negative effect in humans; in animal models more rapid rates of tumor growth have been reported upon increased nutrient intake. Because of ethical considerations similar studies cannot be easily done on cancer patients and the animal data may represent a concern for the oncologist. From a theoretical



point of view however, taking into consideration the growth rates of human cancers and the limited size of the tumors relative to the macronutrient stores of an average man, a significant growth stimulation of human tumors by nutrient intake appears improbable. On the other hand, even assuming that such stimulation occurs, it cannot be considered a completely deleterious aspect of the nutritional supplementation. The antineoplastic action of chemo and radiotherapy depends in fact on the characteristic of tumor cells to multiply at a more rapid rate than normal cells; the effect of the antineoplastic therapy should then be improved by increasing the number of neoplastic cells undergoing multiplication.

2. Although the influence of nutritional supplementation on the outcome of the antineoplastic therapy is unknown, the adverse effects of malnutrition in humans are very well documented, in particular on the immune mechanisms which may be involved in the reaction of the host to the spreading of the neoplastic disease.

3. Most important is the fact that in the majority of cases the available antineoplastic intervention can only prolong to some extent the life of cancer patients and it attempts to limit the physical discomfort deriving from the disease. Under these circumstances the sense of well being and the improved quality of life which can be obtained by proper nutritional support therapy, are advantages which should not be denied any longer to any patient.

#### Brief Summary of Prescribing Information

**Indications and Usage:** Symptomatic relief of anxiety, tension, agitation, irritability and insomnia associated with anxiety neuroses and transient situational disturbances; anxiety associated with depressive symptoms and as a treatment of symptoms of anxiety if such symptoms are a significant feature of functional or organic disorders, particularly gastrointestinal or cardiovascular.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

**Warnings:** Not recommended in primary depressive disorders or psychoses. As with all CNS acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, and to diminish tolerance for alcohol and other CNS depressants.

**Physical and Psychological Dependence.** Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid over sedation.

Terminate dosage gradually since abrupt withdrawal of any anti-anxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions.

Observe usual precautions with impaired renal or hepatic function.

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular components.

Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (approximately 6 times the maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn with 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatric patients requires caution and frequent monitoring for symptoms of upper GI disease.

Safety and effectiveness in children under 12 years have not been established.

**ESSENTIAL LABORATORY TESTS:** Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

**CLINICALLY SIGNIFICANT DRUG INTERACTIONS:** Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

**CARCINOGENESIS AND MUTAGENESIS:** No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

**PREGNANCY:** Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at low doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chloridiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may become pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug.

In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

**NURSING MOTHERS:** It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring of vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levaterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

**Ativan<sup>®</sup> (lorazepam) for Anxiety**

**Dosage:** Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

**How Supplied:** 0.5, 1.0 and 2.0mg tablets.

**Wyeth Laboratories**  
Philadelphia, PA 19101

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# Why one benzodiazepine and not another?

Are you concerned about long-acting metabolites? Many clinicians, as well as pharmacologists, are beginning to draw attention to this problem (see New England Journal of Medicine, April 5, 1979).

In contrast to some older benzodiazepines, Ativan (lorazepam) does not give rise to long-lasting active metabolites. As with all benzodiazepines, you should follow the usual precautions concerning co-administration with other CNS depressants and warn your patients against operating dangerous machinery and motor vehicles.

However, it is noteworthy that Ativan showed no clinical evidence of accumulation even when given in high doses over periods up to 6 months. The half-life of free lorazepam is about 12 hours; steady-state serum levels are attained in 2-3 days. Comparable data for diazepam: 20-50 hours and at least 7-10 days. (The pharmacokinetic profile of a drug can define such characteristics as absorption, distribution, metabolism and elimination but cannot, at present, be directly related to its therapeutic effectiveness.)

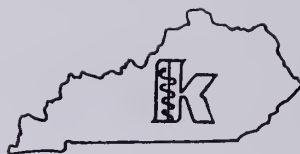
Ativan has a convenient b.i.d. or t.i.d. dosage schedule; it is compatible with a long list of other medications and, of course, it is a highly effective anxiolytic agent, as established in numerous nationwide, double-blind, controlled evaluations in thousands of patients.



See important information on preceding page.

**Ativan<sup>®</sup>**  
**for** (lorazepam)  
**Anxiety**





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## GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

### Empyema Of The Gallbladder

Gallbladder disease continues to be a major cause for hospitalization and operation. Complications are common and if misjudged or poorly handled can result in considerable morbidity and mortality. Among problems identified in biliary tract surgery, infectious complications have not been appropriately discussed.

Empyema of the gallbladder is a relatively common biliary tract complication. A review of a seven-year period at the Louisville Veterans Administration Medical Center has identified 34 cases, an incidence of 11% of all cholecystectomies performed during this period. While this frequency may not be representative of the population in general, it does suggest that more attention need be directed toward the problem. The following two cases illustrate contrasting presentations of empyema of the gallbladder.

#### Case Reports

**Case 1.** A 61-year-old man was admitted to the Louisville VA Medical Center with a 24-hour history of crampy abdominal pain associated with nausea and vomiting. The patient had noted similar episodes of pain, nausea, and vomiting during the preceding several years. He denied any previous history of jaundice. He was afebrile.

Physical examination revealed mild right upper quadrant and epigastric tenderness but no rigidity nor rebound tenderness. Laboratory studies performed at admission demonstrated a white blood cell count of 14,000 cells/cmm; other studies performed at that time were unremarkable including a normal serum bilirubin level.

The patient underwent a routine evaluation

for abdominal pain. Doubledose oral cholecystography was a non-visualizing study; cholecystectomy was performed. At operation, the patient was found to have a large, tense, distended gallbladder. The gallbladder lumen was full of pus and multiple stones. Operative cholangiography was unremarkable. The subhepatic space was drained. Cultures subsequently grew *E. coli*. The patient had an uneventful recovery.

**Case 2.** A 66-year-old male presented with a four-day history of right upper quadrant and epigastric abdominal pain. There was no previous history of similar symptoms. On physical examination, he was slightly icteric and had right upper quadrant tenderness without a palpable mass. Shortly after admission, his fever rose sharply to 105° and clinical examination showed him to be very toxic. His clinical jaundice increased acutely as did complaints of pain. He underwent abdominal exploration with a tentative diagnosis of ascending cholangitis.

At operation, he was found to have a large, distended acutely inflamed gallbladder. A cholecystectomy was done; the gallbladder lumen was full of pus. The common duct was only 5 mm in diameter and the tissues about the common duct were acutely inflamed. Multiple attempts at operative cholangiography were unsuccessful, since the lumen of the duct could not be entered with a 25 gauge needle. Reluctantly, efforts to perform operative cholangiography were abandoned and the subhepatic space was drained and the procedure terminated.

The patient's postoperative course was quite unremarkable. His jaundice and clinical sepsis rapid resolved. Cultures grew *E. coli* from the purulence in the gallbladder.

*From the Department of Surgery, University of Louisville School of Medicine, and the Surgical Service, Veterans Administration Hospital, Louisville, Ky.*



## Discussion

These two illustrative cases demonstrate the contrasting presentation of empyema of the gallbladder. The patients were of similar age and the bacterial pathogen identified in each case was the same. However, the first patient with a long history of biliary symptoms presented in a very indolent fashion, while the second patient had a fulminant illness with severe clinical sepsis and no antecedent history suggestive of biliary colic.

Empyema of the gallbladder represents one of the several possible outcomes in the natural history of acute cholecystitis. With obstruction of the cystic duct orifice, increased pressure is generated within the gallbladder lumen as the smooth muscle contractions of the gallbladder attempt to expell the obstructing calculus. This commonly presents in the clinical setting as classical right upper quadrant biliary colic. If bacterial contamination is present within the obstructed gallbladder lumen, then acute cholecystitis is the result and several possible sequelae can be identified.

(1) The obstructing stone may be dislodged either into the common duct or back into the lumen of the gallbladder, thus eliminating the acute cystic duct obstruction. Multiple repeated episodes of temporary obstruction and inflammation followed by resolution account for the chronically thickened gallbladder wall identified in patients with chronic cholecystitis. The stone that is expelled into the common duct may in turn serve as a source of common duct obstruction and possible ascending cholangitis.

(2) Since the cystic artery represents a true end artery without collateral blood flow in its distribution, the acute inflammation and infection may result in thrombosis of the main cystic artery or one of its branches. This results in gangrenous cholecystitis and, depending upon the rapidity of intervention, may lead to perforation of the gallbladder.

(3) The infection may be contained within the lumen of the gallbladder and empyema results. As the inflammation and local vasodilation progress, leukocytes and fibrin precursors extravasate into the biliary lumen resulting in frank pus. The infection may proceed to gangrene and perforation, or the invasive character of the infection with the increase intraluminal pressure from cystic duct obstruction may erode the wall of the gallbladder resulting in perforation without gangrene.

Considering the pathogenesis of empyema and other infectious complications of the gallbladder, prevention would appear to center around effective treatment of acute cholecystitis. Central to this discussion is whether emergent operation should be performed for acute cholecystitis or whether conservative, nonoperative therapy should be employed and operation performed subsequently as an elective procedure.

Several authors have been critical of the early, emergent operation for this problem.<sup>1,2</sup> Frequently, the diagnosis is not firmly established by previous cholecystography. Patients may have had symptoms for a considerable period of time prior to seeking medical attention and may not fall into the "golden period" (initial 72 hours of symptoms); concern over technical difficulties caused by hyperemia and edema in the area of the biliary tract may discourage earlier intervention. Of course, many patients may have poorly controlled associated illness that may not make emergent operation attractive.

Nonoperative therapy usually consists of nasogastric suction, intravenous fluid support, and systemic antibiotic therapy. Anticholinergic drugs are advocated but are of questionable value. This regimen is continued until resolution of the acute episode and elective operation is delayed for a minimum of three weeks. Of course, if the patient presents with fever, jaundice, and right upper quadrant pain or if clinical improvement is not recognized with nonoperative therapy, then operation should proceed promptly.

We believe that early operation for acute cholecystitis is the preferable solution for the prevention of serious complications of empyema or related infectious problems. Those patients that can be confidently diagnosed as having acute cholecystitis should have intravascular volume expanded appropriately with intravenous fluids, antibiotics initiated, and operation undertaken without attempts at nonoperative therapy. Normally the operation is not technically different than if done at a later time. In addition, early operation has neither an increased morbidity nor mortality<sup>3,4</sup> and has the socioeconomic advantages of reducing total hospitalization time.

In selected cases when the diagnosis is in question or associated illness (e.g. congestive heart failure) makes operative risk prohibitive, nonoperative therapy may be useful. However, when diagnostic studies confirm the diagnosis or associated medical problems are brought under better

control, operation should proceed expeditiously; waiting a specified length of time is not necessary.<sup>3</sup>

Antibiotics are generally recommended for patients with acute cholecystitis, whether the primary treatment is operative or nonoperative in nature. The value of antibiotics in preventing acute cholecystitis from developing into empyema of the gallbladder is questionable when one considers the near total absence of significant antibiotic concentrations in the gallbladder bile and tissue when the cystic duct is obstructed.<sup>5</sup> Antibiotics are obviously indicated for the patient with ascending cholangitis or with an established empyema of the gallbladder as adjuncts to definitive surgical treatment.

The antimicrobial chemotherapeutic choice should be directed against bacteria known to be present in the biliary tract. Studies by Chetlin and Elliott<sup>6</sup> have shown that *E. coli*, and members of the Klebsiella-Enterobacter group are the most common bacteria recognized in the biliary tree. The antibiotic choice should achieve high levels of drug concentration in the bile and gallbladder tissue and should be effective against the anticipated bacterial pathogens. Cefazolin is one drug that achieves this objective and is recommended in biliary tract sepsis.<sup>7</sup> Of course, when operation has been performed for either acute cholecystitis or empyema, culture and sensitivity data obtained at operation should guide postoperative antibiotic therapy.

### Summary

Acute cholecystitis may result in empyema of the gallbladder. Early operation for acute cholecystitis will minimize the frequency of this complication. If nonoperative treatment of acute cholecystitis is preferred, then operation should be immediately performed if the patient fails to improve clinically. Patients receiving successful nonoperative therapy in acute cholecystitis should have prompt elective cholecystectomy.

DONALD E. FRY, M.D.

REX A. COX, Major, M.D., USAF, MC

PHIL J. HARBRECHT, M.D.

*The views expressed herein are those of the authors and do not necessarily reflect the opinion of the United States Air Force.*

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†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

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For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage:** Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE. MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>™</sup> (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

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This is the first of a regular series of brief articles about professional liability insurance that will appear in the KMA Journal, as a service to KMA members.

Insurance is an increasingly significant cost factor for physicians, who generally need more protection than individuals in other professions. This stems from the absolute need for medical professional liability protection, in an era when many members of the public appear to expect more than is humanly possible from the health care profession.

This cost factor has been subjected to considerable volatility in recent years, as many professional liability insurance carriers have engaged in various marketing restrictions or have initiated substantial rate increases.

Since the need for professional liability insurance extends throughout a physician's career . . . and even after retirement . . . the need for a stable source of this protection is clearly evident.

Few physicians or insurance leaders several decades ago really anticipated the situation that has existed during the past several years in medical professional liability, in terms of trends in lawsuits and settlements, resultant rate increase and lack of availability of coverages.

It is understandable that organized medicine in most leading states has turned to the concept

of physician-owned insurance companies as a means of ensuring the stability that physicians so badly need in the insurance marketplace.

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An insurance organization owned by physicians is best able to react to the needs and desires of physicians. Add professional insurance management, and you have an organization with the opportunities and capabilities for unique and continuing operations.

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## ASSOCIATIONAL NEWS



### Scientific Sessions Will Highlight 1979 KMA Annual Meeting

The four themes of "Trauma", "The World of Cancer", "The Biliary Tree", and "Recent Advances in Medical Practice" will be discussed in the general scientific sessions of the KMA Annual Meeting on Tuesday, September 25, Wednesday, September 26 and Thursday, September 27 at the Ramada Inn/Bluegrass Convention Center.

The Meeting opens officially on Monday, September 24, when the House of Delegates meets at 9 a.m. in the Julia Belle room of the Convention Center. A second meeting of the House of Delegates will be held on Wednesday, September 26, at 6 p.m. also in the Julia Belle room.

Twenty-one specialty groups will meet on Tuesday afternoon, September 25 and Thursday afternoon, September 27.

Executive Vice President of the American Medical Association, James H. Sammons, M.D., will be the featured speaker at the President's Luncheon, scheduled for 11:50 a.m., Wednesday, September 26. In addition, there will be an awards ceremony and the installation of the KMA President, Robert S. Howell, M.D.

Other events during this year's Annual Meeting include the KEMPAC Seminar, alumni reunions of the U of L and UK medical schools, and meetings of the Women's Auxiliary to KMA.

Complete details of the 1979 Annual Meeting appeared in the August *Journal* of KMA.

### MISCELLANEOUS MEETINGS

#### During 1979 Annual Meeting

##### Monday, September 24

- 9:00 a.m. KMA House of Delegates, Julia Belle Room, Convention Center
- 12:30 p.m. Reference Committee Chairmen, Luncheon, Delta Queen Room, Convention Center
- 2:00 p.m. Reference Committee Meetings, Cincinnati Room, Island Queen-Idlewild Rooms, Majestic-New Orleans Rooms, Grand Republic Room, Mississippi Queen Room, Natchez Room, Convention Center

- 6:00 p.m. KEMPAC Reception, Banquet and Seminar, Julia Belle Room, Convention Center
- 6:00 p.m. Kentucky Urological Association, Reception, Jeffersonian Room, Convention Center

##### Tuesday, September 25

- 7:00 a.m. Maternal Mortality Study Committee, Breakfast, Jeffersonian Room, Convention Center
- 12:00 noon KMA Executive Committee and Reference Committee Chairmen, Luncheon, Louisville Room, Ramada Inn
- 12:00 noon Kentucky Chapter, American College of Surgeons, Luncheon, Jeffersonian and Magnolia Rooms, Convention Center
- 5:00 p.m. Kentucky Society of Anesthesiologists, Social Hour, Studio Suite, Ramada Inn
- 6:30 p.m. American Medical Women's Association, Dinner, Kentucky Room, Convention Center
- 6:30 p.m. Kentucky Urological Association, Banquet, Jefferson Club, Louisville
- 6:30 p.m. Kentucky Chapter, American College of Chest Physicians, Social Hour, Dinner (7:30 p.m.), Julia Belle Room, Convention Center
- 6:30 p.m. Kentucky Chapter, American Academy of Pediatrics, Cocktails, Dinner (7:30 p.m.), Grand Republic Room, Convention Center
- 7:00 p.m. Kentucky Society of Plastic and Reconstructive Surgery, Dinner, Bill Boland's, 3708 Bardstown Road, Louisville
- 6:30 p.m. American Medical Women's Association, Dinner, Jeffersonian and Magnolia Rooms, Convention Center

##### Wednesday, September 26

- 8:00 a.m. Auxiliary to the KMA, Breakfast, Jeffersonian Room, Convention Center
- 11:50 a.m. KMA President's Luncheon, Julia Belle Room, Convention Center
- 3:00 p.m. KMA Board of Trustees Meeting and Dinner (5 p.m.), Mississippi Queen Room, Convention Center
- 6:00 p.m. Second Meeting, KMA House of Delegates, Julia Belle Room, Convention Center



### Thursday, September 27

- 12:00 noon KMA Board of Trustees, Luncheon, Jeffersonian Room, Convention Center
- 12:00 noon Kentucky Psychiatric Association, Lunch, Louisville Room, Convention Center
- 12:00 noon Kentucky Occupational Medical Association, Lunch, Kentucky Room
- 6:00 p.m. Louisville Academy of Ophthalmology, Dinner, Kunz's
- 6:00 p.m. Louisville Allergy Society, Dinner, Louisville Room, Ramada Inn
- 6:30 p.m. Kentucky Psychiatric Association, Dinner, Jeffersonian and Magnolia Rooms, Convention Center

## U of L Lectureship Will Feature Professor From Goteborgs, Sweden

Doctor Professor Petter Karlberg will be the Pediatric Lecturer for the University of Louisville on October 31. The lecture will be held in the Health Sciences Center Auditorium, Flexner Way, Louisville, at 12:00 noon.

On November 1, 2 and 3, the Department of Pediatrics and U of L School of Medicine will also host the Annual Newborn Symposium in commemoration of "The International Year of the Child." Many guest speakers are scheduled including Doctor Karlberg.

For more information contact: Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics University of Louisville School of Medicine, P.O. Box 35260, Louisville, Ky. 40232 or (502) 588-5753.

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**Contraindications:** TRIDIHETHYL CHLORIDE: Allergic or idiosyncratic reactions to this or related compounds; glaucoma; obstructive uropathy (e.g., bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the G.I. tract (as in achalasia, paralytic ileus, pyloroduodenal stenosis, etc.); intestinal atony of the elderly or debilitated; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. MEPROBAMATE: Acute intermittent porphyria; allergic or idiosyncratic reactions to it or related compounds (carisoprodol, mebutamate, tybamate or carbromal).

**Warnings:** TRIDIHETHYL CHLORIDE: In high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Do not treat diarrhea associated with ileostomy or colostomy with this drug. If drowsiness or blurred vision occurs, warn the patient not to engage in activities requiring mental alertness (operating motor vehicles or machinery) or to perform hazardous work. MEPROBAMATE: *Drug dependence:* Physical and psychological dependence and abuse have occurred. Carefully supervise dose and amounts. Avoid prolonged use to alcoholics and those with known propensity for taking excessive quantities of drugs. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis, and rare convulsive seizures more apt to occur in those with CNS damage or pre-existent or latent convulsive disorders). Withdrawal symptoms usually begin within 12-48 hours after drug stoppage and cease within the next 12 to 48 hours. Reduce excessive and prolonged dosage gradually over one or two weeks rather than stopping abruptly, or substitute a short-acting barbiturate, then gradually withdraw. *Potentially hazardous tasks:* (see above) *Additive Effects:* Meprobamate and alcohol, other CNS depressants, or psychotropic drugs may be additive; take appropriate precautions. *Pregnancy and Lactation:* Several studies indicate increased risk of congenital malformations with use of minor tranquilizers (meprobamate, chlorthalidoxepoxide, diazepam) during the first trimester of pregnancy. Avoid use of these drugs during this period. Consider possibility of pregnancy in a woman of childbearing potential at time of drug institution. If patient becomes pregnant during therapy with this drug, consult physician about desirability of discontinuing use of the drug. Meprobamate passes the placental barrier, is present in umbilical cord blood and breast milk of lactating mothers at concentrations two to four times that of maternal plasma; take in account in breast-feeding patients.

**Precautions:** TRIDIHETHYL CHLORIDE: Use with caution in autonomic neuropathy, hepatic or renal disease, early evidence of ileus, e.g., peritonitis, ulcerative colitis (large doses may suppress intestinal motility, thus producing a paralytic ileus; may precipitate or aggravate toxic megacolon), hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, hypertension, non-obstructing prostatic hypertrophy, hiatal hernia associated with reflux esophagitis. In the treatment of gastric ulcer may produce a delay in gastric emptying time (antral stasis). Do not rely on drug in complication of biliary tract disease. May increase heart rate in tachycardia. With overdosage, a curare-like action may occur. *Meprobamate:* To preclude oversedation, give the lowest effective dose to elderly and/or debilitated patients. Consider suicidal attempts and dispense the least amount of drug feasible at any one time. Use with caution in patients with compromised liver or kidney function to avoid excess accumulation. May precipitate seizures in epileptics.

**Adverse Reactions:** (Can occur with either component) TRIDIHETHYL CHLORIDE: (Physiologic or toxic, depending on patient response) xerostomia; urinary hesitancy and retention; tachycardia; palpitations; blurred vision; mydriasis; cycloplegia; increased ocular tension; loss of taste, headaches; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; decreased sweating; some degree of mental confusion and/or excitement especially in the elderly. MEPROBAMATE: *CNS:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impaired visual accommodation; euphoria, overstimulation; paradoxical excitement, fast EEG activity. *G.I.:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations; tachycardia, arrhythmias, transient ECG changes, syncope, hypotensive crises (one fatal case). *Allergic or Idiosyncratic:* (Usually seen during the first to fourth dose in those having no previous contact with the drug). Mild reactions are itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others include leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe (rare) include hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome, bullous dermatitis (one fatal case when given in combination with prednisolone). In case of such reactions, discontinue drug and initiate appropriate therapy (epinephrine, antihistamines, and, in severe cases, corticosteroids). Consider allergy to excipients (furnished to physicians on request). *Hematologic:* (See also Allergic or Idiosyncratic) Agranulocytosis, aplastic anemia (rarely fatal). Thrombocytopenic purpura (rare). *Other:* Exacerbation of porphyric symptoms.

All Contraindications, Warnings, Precautions, and Adverse Reactions in regard to Tridihexethyl chloride refer also to PATHILON® Tridihexethyl Chloride Lederle.

\*The FDA has evaluated PATHIBAMATE as possibly effective as adjunctive therapy in irritable bowel syndrome.



## Headquarters Activity

### AUGUST

- 8-9 Board of Trustees Meeting, Louisville
- 14 Journal Editors, Louisville
- 16 Committee on Membership and Placement Services, KMA Headquarters, Louisville
- 16 Committee on Physician's Health, KMA Headquarters, Louisville
- 23 Committee on Continuing Education, KMA Headquarters, Louisville

### SEPTEMBER

- 6 Maternal and Child Health Care Committee, KMA Headquarters, Louisville
- 11 Journal Editors, Louisville
- 23-27 KMA Annual Meeting

### OCTOBER

- 9 Journal Editors, Louisville
- 20 Physician Recruitment Fair, Ramada Inn, Louisville

## CHANGE OF ADDRESS

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September 1979 • The Journal

## Hoyt D. Gardner M.D. is 8th Kentuckian Elected AMA President



In his inaugural speech, Dr. Gardner stressed the need for continued support of Voluntary Cost Restraint Programs.

Hoyt D. Gardner, M.D., a Louisville general surgeon, was installed July 25, 1979 as the 134th President of the American Medical Association. Doctor Gardner is the 8th Kentuckian to be elected to this position.

The inauguration was attended by more than 220 Kentuckians, the largest state contingency to attend an inauguration in the AMA history.

Doctor Gardner, in his inaugural address, called for physicians to make a renewed commitment to basic ethical principles and to work with the AMA in taking a greater role in shaping the direction that biomedical ethics will take in the years to come. "Technology and technique must never be allowed to overwhelm a reverence for what is human in man. And that reverence is where ethics begin."

Doctor Gardner stated that ethical awareness must include cost awareness. He urged more effort in disciplining physicians who abuse the health care finance system and encourages more research into understanding diseases and treatments within the context of today's need for cost containment.



Entertainment at the Inauguration was provided by the Stephen Foster Singers, Bardstown, and Mr. Chet Atkins.



Robert B. Hunter, M.D., Chairman of the AMA Board, administered the oath of office to Dr. Gardner.



Carl Cooper, M.D., KMA President and Hoyt D. Gardner, M.D., AMA President, conferred during a special gathering at the six-day meeting.



## PROFESSIONALS ARE:

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# WHICH ONE WILL IT BE?



**John Y. Brown, Jr. (D)**

Don't forget to make plans now to attend the 17th Annual KEMPAC Seminar and hear Kentucky's two gubernatorial candidates. You will have an opportunity to ask questions after the presentations.

TICKETS ARE ON SALE NOW! They can be purchased from a KEMPAC Director or the KEMPAC Headquarters Office at \$15.00 each.

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★  
Monday, September 24, 1979  
6:00 p.m. EDT—Reception  
7:00 p.m.—Dinner with program  
to follow  
★

★  
Julia Belle Room  
Ramada Inn  
Bluegrass Convention Center  
Louisville, KY.  
★

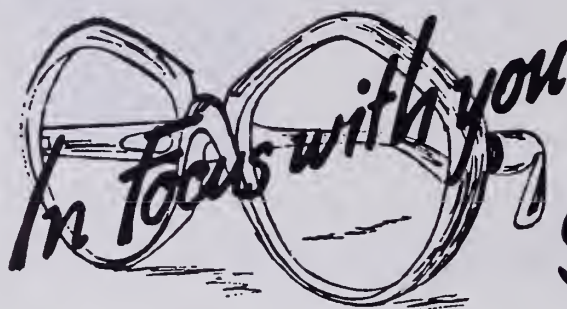
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**Number to Use for Messages  
is 502-491-1929**

A Message Center will be set up during the 1979 KMA Annual Meeting. This is a central hotel number through which all messages will be routed.

The Message Center will be located inside the lobby of the Bluegrass Convention Center.





# Southern Optical

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|                      | 313 Wallace Avenue                           |                        | <b>895-9155</b> |
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|                      | Happy Valley Center                          | 409 Happy Valley Rd.   | <b>651-5113</b> |

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## REGISTRATION INFORMATION

A registration booth will be located in the lobby of the Ramada Inn/Bluegrass Convention Center throughout the Annual Meeting. The booth will be open at 8 a.m., Tuesday, Wednesday, and Thursday, September 25-27.

Please register and wear your badge at all times while attending the meeting.

## MAKE YOUR RESERVATIONS NOW

It is important that you begin to make your room reservations as soon as possible for the KMA Annual Meeting, September 24-27. The Ramada Inn/Bluegrass Convention Center at I-64 and Hurstbourne Lane will be the Headquarters Hotel, however, there are several other accommodations within easy reach of Ramada Inn and the Bluegrass Convention Center. In making your reservations, remember the first House of Delegates meeting will be Monday, September 24.

# Reference Committee Activity

Speaker Bennett L. Crowder, II, M.D., Hopkinsville, will assign all officers' and committees' reports and resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9:00 a.m., Monday, September 24. Briefing sessions for Reference Committee Chairmen will be held at 12:30 p.m., Monday, in the Delta Queen Room in the Bluegrass Convention Center. Any KMA member wishing to testify on any resolution or report is urged to be present for the **Reference Committee meetings** which will be held at 2:00 p.m., Monday, September 24, in the Bluegrass Convention Center. These open sessions will last one hour, in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive session to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented at the final session of the House, Wednesday evening, September 26. Both sessions of the House will be held in the Julia Belle Room in the Bluegrass Convention Center.

## 1979 KMA Reference Committee Appointments

### REFERENCE COMMITTEE NO. 1

#### Cincinnati Room

Donald R. Neel, M.D., Owensboro, Chairman  
W. E. Becknell, M.D., Manchester  
R. Kendall Brown, M.D., Georgetown  
Willis P. McKee, M.D., Shelbyville  
Carroll H. Robie, M.D., Louisville

### REFERENCE COMMITTEE NO. 2

#### Island Queen-Idlewild Rooms

Edwin J. Nighbert, M.D., Lexington, Chairman  
William M. Carney, M.D., Elizabethtown  
Michael B. Flynn, M.D., Louisville  
Kenneth M. Eblen, M.D., Henderson  
Wiley E. Kozee, M.D., Ashland

### REFERENCE COMMITTEE NO. 3

#### Majestic-New Orleans Rooms

W. Bruce Hamilton, M.D., Shepherdsville, Chairman  
N. H. Talley, M.D., Princeton  
John E. Trevey, M.D., Lexington  
James P. Moss, Louisville  
William R. Yates, M.D., Hebron

### REFERENCE COMMITTEE NO. 4

#### Grand Republic Room

Glenn W. Bryant, M.D., Louisville, Chairman  
Peter P. Bosomworth, M.D., Lexington  
Cecil D. Martin, M.D., Carrollton  
William B. Monnig, M.D., Erlanger  
Nelson B. Rue, M.D., Bowling Green

### REFERENCE COMMITTEE NO. 5

#### Mississippi Queen Room

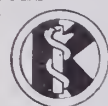
Robert E. Smith, M.D., Covington, Chairman  
James C. Embry, M.D., Paducah  
Allen E. Grimes, M.D., Lexington  
David E. Townes, M.D., Louisville  
Terry L. Wright, M.D., Elkhorn City

### REFERENCE COMMITTEE NO. 6

#### Natchez Room

Don E. Cloys, M.D., Richmond, Chairman  
D. Kay Clawson, M.D., Lexington  
C. Douglas LeNeave, M.D., Mayfield  
Edward N. Maxwell, M.D., Louisville  
R. D. Pitman, M.D., Williamsburg





## Members in the news

### IN MEMORIAM

**THURMAN M. PERRY, M.D.**  
1896-1979  
Jenkins, Ky.

Thurman M. Perry, M.D., 82, died on July 15 in his home as a result of an accidental drowning. Doctor Perry was a 1927 graduate of the University of Cincinnati College of Medicine. He was a member of KMA since 1930 and retired 15 years ago as a General Practitioner in Jenkins, Ky. Doctor Perry was the recipient of the Doctor of the Year Award in 1966.

### NEW MEMBERS

#### BOYD

William G. Uhron, M.D., Ashland  
Edakkunny W. Unnikrishman, M.D., Ashland

#### BOYLE

G. Russell Shearer, M.D., Danville  
Robert Stigall, M.D., Danville

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Randel Gibson, D.O., Arlington

#### CALLOWAY

Thomas L. Green, M.D., Murray  
Walter W. Jones, M.D., Murray  
Clarence G. Vire, M.D., Murray

#### CHRISTIAN

James E. Connerth, M.D., Hopkinsville

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Leopoldo P. Palad, Jr., M.D., Ft. Thomas  
Lloyd S. Rothhouse, M.D., Covington  
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James A. Bottiggi, M.D., Lexington  
Gary T. Bray, M.D., Lexington  
Peggy A. Domstad, M.D., Lexington  
Marc N. Dubick, M.D., Lexington  
John M. Fox, M.D., Lexington  
Neven John Gardner, M.D., Lexington  
Tony Goetz, Winchester  
Lawrence Guzzardi, M.D., Lexington  
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Ronald L. Humphrey, M.D., Lexington

Oscar A. Mendiando, M.D., Lexington  
Mellayne R. Myers, M.D., Lexington  
Andrew R. Pulito, M.D., Lexington  
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Thomas K. Slabaugh, M.D., Lexington  
Richard F. Smith, M.D., Lexington  
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Alexander L. Vigh, M.D., Lexington  
Emery A. Wilson, M.D., Lexington  
David L. Winkle, M.D., Lexington  
Jerry L. Yon, M.D., Lexington

#### FRANKLIN

Andrew Bustin, M.D., Frankfort

#### HARLAN

William Bechtold, DDS, Harlan  
Sreenivasan C. Kotay, M.D., Harlan

#### HARRISON

Amarjit Viens, M.D., Cynthiana

#### HOPKINS

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George Frederick, M.D., Madisonville  
Milton J. Moore, M.D., Madisonville  
Allan K. Stryker, M.D., Madisonville  
Gilberto Wee, M.D., Madisonville

#### HENDERSON

Ricardo B. Maddela, M.D., Henderson

#### JEFFERSON

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Chao Hung Chan, M.D., Louisville  
Robert E. Ellis, M.D., Louisville  
Kenneth E. Embry, M.D., Louisville  
Helen Guerrero, M.D., Louisville  
P. Patrick Hess, M.D., New Albany  
Judy M. Hurst, M.D., Louisville  
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Thomas James III, M.D., Louisville  
Warren T. Kable, III, M.D., Louisville  
Richard Levin, M.D., Louisville  
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James O. O'Brien, M.D., Louisville  
Navin P. Patel, M.D., Louisville  
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Adil Y. Yamour, M.D., Louisville  
Sheldon B. Zolna, M.D., Louisville  
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**MEDICAL OPPORTUNITIES**

MAYSVILLE, Ky., dynamic secondary care center, doubled staff in 15 months. Still needs two Ob/Gyn, radiologist, ENT, (no full-time residents now) to develop departments in planned hospital. Financial incentives available. If you want to be your own boss and to practice by standards you help develop, call Chuck Kirk, (606) 564-4013.

GENERAL MEDICAL INTERNISTS for full-time faculty positions in an innovative developing program at the East Carolina University School of Medicine. Address inquiries and C.V. to Department of Medicine, East Carolina University School of Medicine, Greenville, North Carolina 27834. Affirmative Action/Equal Opportunity Employer.

KENTUCKY EMERGENCY PHYSICIAN—Lovely community of 10,000 in western Kentucky near Paducah needs two physicians to share evening rotations in the emergency department. 10 to 15 patients per 12-hour shift. Income excellent for this volume. For additional details, contact Tom Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982, ext. 225.

FAMILY PRACTITIONER, 71 bed full service hospital, office space available. Contact or write, James C. King, M.D., Chief of Medical Staff, Woodford Memorial Hospital, Versailles, Ky. 40383, (606) 873-3111.

# For recurrent attacks of urinary tract infection in women

## Bactrim™ DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

### Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage:** For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.**

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarthritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

**Urinary Tract Infections:** Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

*Children two months of age or older:*

| Weight |     | Dose—every 12 hours |                          |
|--------|-----|---------------------|--------------------------|
| lbs    | kgs | Teaspoonfuls        | Tablets                  |
| 20     | 9   | 1 teasp. (5 ml)     | ½ tablet                 |
| 40     | 18  | 2 teasp. (10 ml)    | 1 tablet                 |
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October 1979  
Volume 77  
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## MESSAGE FROM THE PRESIDENT



**A** new year in our Association's history begins now with the completion of our Annual Meeting and, as President, I look forward, with anticipation to the next 12 months and with humility for the honor you have given me.

Once again, I carried from the meeting several strong impressions. The scientific excellence of the programs was at its usual high standard of quality, and one can't help feeling gratified. Internally, we have individuals with the ability to develop such programs. Organizationally, we have the capability and resources to produce them, and professionally, our commitment to voluntarily support continuing education is obvious.

An equally strong impression was one of unity. The issues considered by the House of Delegates were diverse and sometimes controversial. Yet, through the vehicle of the Delegates' meeting, all views had a forum for expression. Positions taken will be used to represent the entire membership and constitute a true democratic consensus.

The course charted for the Association by virtue of these positions will not be an easy one, particularly in the legislative and governmental areas. Health planning trends, consumerism, medical shortages and maldistribution have resulted in the delivery of medical care in "experimental" fashion, increased use of non-physicians and increasing control of the traditional medical service system. Compromise in some areas is unavoidable, but acquiescence is unthinkable. With these forces arrayed in opposition, our tasks are formidable.

Nor can any grand pledges guarantee successes. Our collective efforts and the expertise so many of us have to offer in specific areas are vital. Equally important is the collective support and faith we must devote to our profession and our medical federation.

Proof of that support can be evidenced by participation in KEMPAC, in our own insurance company, KMIC, and all the other activities KMA is involved in. Simply put, each member must help. My plea to you is for your help. My pledge is to humbly do my best.

On one occasion, Abraham Lincoln said, "The subject is difficult and good men do not agree." Unanimous opinion is not always possible. The need for cooperative unity is critical. To remain silent on an issue is to give assent. I hope to serve this cause well and urge your thoughts, criticism and assistance.

**ROBERT S. HOWELL, M.D.**  
KMA President



## POSTGRADUATE OPPORTUNITIES

### IN KENTUCKY

#### OCTOBER

- 4-6 23rd Annual Meeting—American Association for Automotive Medicine,\*\* Galt House and HSC
- 11-13 The Radiology of Multisystem Diseases,\* Hyatt Regency Hotel, Lexington
- 17-18 Hypertension 1979\*\*
- 20 Kentucky Regional Meeting, American College of Physicians, Hyatt House, Louisville
- 25 20th Annual John Walker Moore Lecture,\*\* Health Sciences Center
- 26-27 Kentucky Thoracic Society Scientific Conference, Lexington Hilton
- 31 Louisville Pediatric Society Lecture,\*\* Health Sciences Center

#### NOVEMBER

- 1 Diabetes Seminar,\*\* Stouffer's Louisville Inn
- 1-3 13th Annual Newborn Symposium,\*\* Health Sciences Center
- 2-3 "Exploited Children: Another Year of That?" (AASP).\*\* Galt House, Commonwealth Convention Center
- 5 Yandell Lecture", Health Sciences Center

#### DECEMBER

- 7-8 Selected Topics in Nephrology and Urology,\*\* Stouffers

\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

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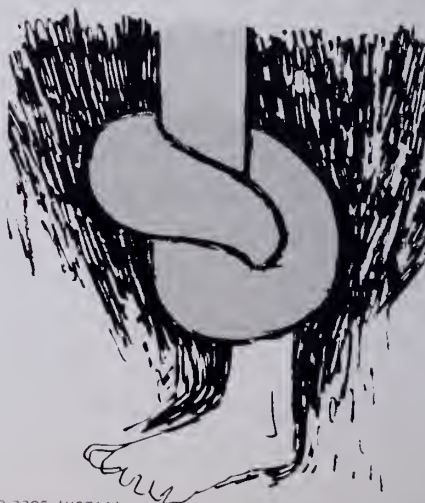
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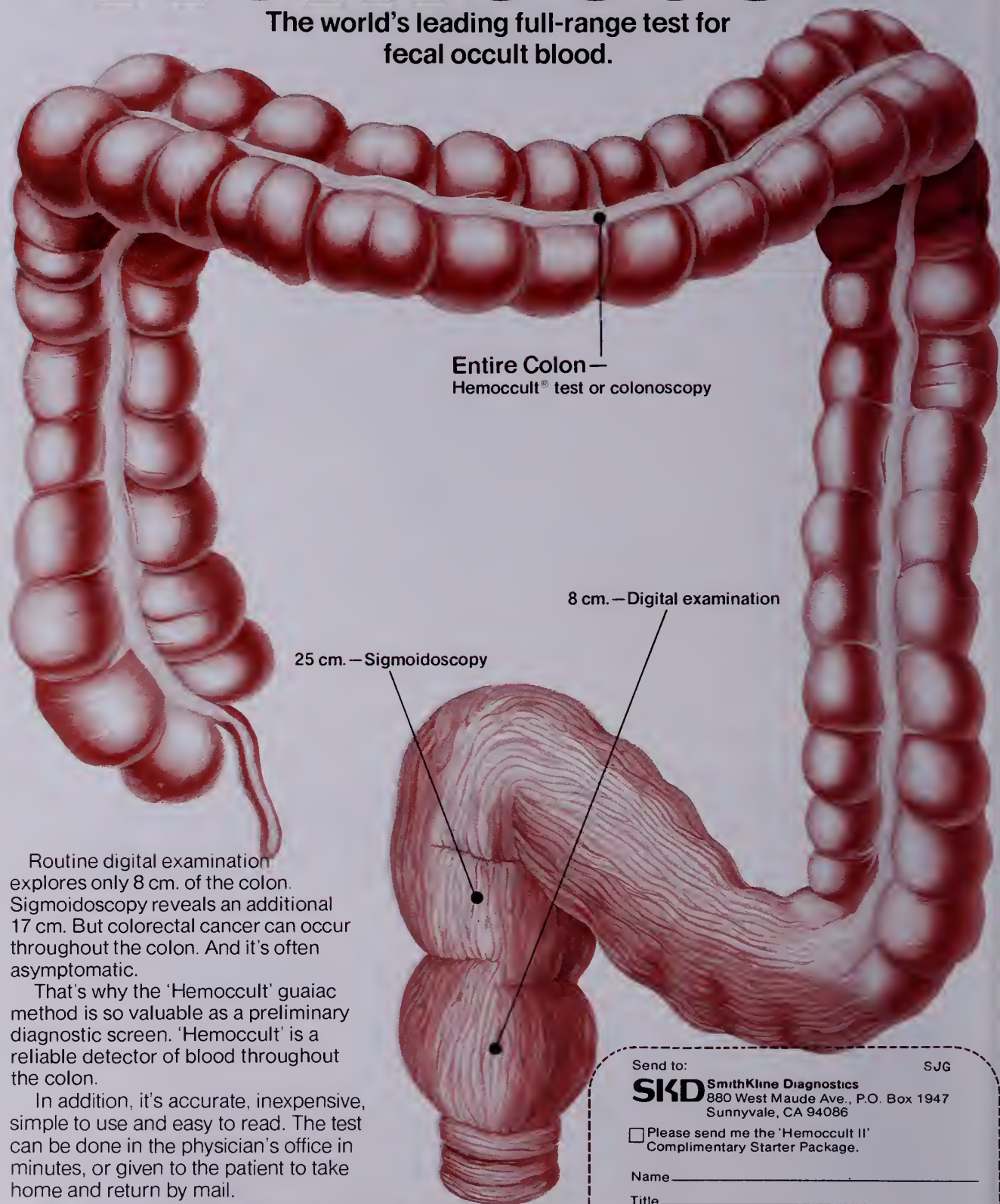
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# Carcinoma of the Gallbladder: A Community Hospital Perspective

WILLIAM H. MITCHELL, M.D., BRACK A. BEVINS, M.D. AND WILLIAM G. CLOUSE, M.D.  
RICHMOND, KENTUCKY

Carcinoma of the gallbladder was found in eight (1.7%) of 465 patients who underwent cholecystectomy for presumed benign disease from 1972 until 1978. In five cases the carcinoma was not recognized at the time of operation and only a simple cholecystectomy was performed. Two patients noted to have carcinoma intraoperatively underwent a wedge resection of the gallbladder bed and choledochal node dissection in addition to cholecystectomy. The eighth patient had duodenal invasion by carcinoma and underwent a gastrojejunostomy. All eight patients were dead within 14 months of operation.

Carcinoma of the gallbladder accounts for 3% of all neoplasms and 8-10% of tumors in women. The incidence of carcinoma of the gallbladder in patients with cholelithiasis is said to be from 0.2-10%. The prognosis in this disease is dismal and five years survival figures are generally less than 5%. The purpose

of this paper is to review the cases of cholecystic carcinoma seen at the Pattie A. Clay Hospital, Richmond, Kentucky during the six year period from 1972-1978.

**Clinical Material:** A total of 465 cholecystectomies were performed at our hospital between 1972 and 1978. The pathologic diagnosis of carcinoma of the gallbladder was made in eight cases. Thus primary carcinoma of the gallbladder occurred in 1.7% of these patients during this six year period. Two patients were men and six were women. The age range was from 39-85 years with an average age of onset of symptoms being 65 years.

**Clinical Finding and Diagnostic Studies:** The most common presenting complaint was right upper quadrant pain. This occurred in eight patients. Jaundice, nausea and vomiting occurred in four patients. Weight loss was documented in two patients. The duration of symptoms before hospitalization ranged from 6-90 days with an average of 53 days. Four patients had had "gallbladder trouble" for years.

**Physical Findings:** Clinical jaundice (namely icteric sclera or cutaneous jaundice) occurred in four patients. Hepatomegaly was noted in two patients. Right upper quadrant mass was palpable in three patients.

**Laboratory:** Liver function studies revealed hyperbilirubinemia in four patients. Alkaline Phosphatase was elevated in five patients and SGOT was increased in three patients.

*Doctors Mitchell and Clouse are from the Pattie A. Clay Hospital, Richmond, Ky. Doctor Bevins is from the University of Kentucky Medical Center, Lexington, Ky.*



# CARCINOMA OF THE GALLBLADDER—Mitchell, Bevins and Clouse

**Radiographic:** The oral cholecystogram showed gallstones in one patient and non visualization of the gallbladder in four patients. Oral cholecystograms were not done in three patients. Barium enema was done in two patients and was normal. UGI series was done in three patients without diagnostic abnormality noted.

**Pathologic:** A total of seven patients had infiltrative carcinoma of the gallbladder. One patient had carcinoma in situ of the gallbladder.

**Operative Findings:** Eight patients who had cholecystic carcinoma underwent operation. Of these, six patients had curative cholecystomy for presumed benign gallbladder disease and two patients noted to have carcinoma of the gallbladder at the time of operation underwent extended wedge resection of the gallbladder bed and choledochal node dissections in addition to cholecystectomy. It should be noted that in all of these patients carcinoma of the gallbladder was unsuspected preoperatively and in all patients it was either an intraoperative or postoperative pathologic finding.

**Results:** Survival statistics reveal that of the eight patients (who underwent operations for gallbladder disease and were) found to have cholecystic carcinoma, seven patients were dead within 14 months postoperatively. The average survival time was 7.4 months. One patient with carcinoma in situ of the gallbladder is alive and asymptomatic 22 months (S/P operative) after simple cholecystectomy.

**Conclusion:** The results of this study indicate that the prognosis for infiltrative carcinoma of the gallbladder from our hospital experience is quite dismal. All patients with infiltrating carcinoma of the gallbladder were dead within 14 months of the operation and detection of the cholecystic carcinoma. In all eight cases of cholecystic carcinoma, the diagnosis was made at the time of operation or as the result of examination microscopically of the pathologic specimen. This reinforces the suggestion that the surgeon should open and carefully examine the gallbladder wall during all elective and emergency cholecystectomies. There was no significant difference in survival rate in that two cases who had extended resection for infiltrating gallbladder carcinoma and the five patients who had simple cholecystectomy for their disease.

The results of this study suggest that if otherwise inapparent gallbladder carcinoma is to be treated at the time of cholecystectomy, the gallbladder must be opened and examined in the operating room. When invasive carcinoma is found, extended resection or reoperation does not seem to be warranted.

**References** 1. Blalock JB; "An Analysis of 15 Cases of Gallbladder Carcinoma"; *Amer Surg* May 1978. 2. Bevins BB, and Griffen WO; "Carcinoma In Situ of the Gallbladder"; *Southern Med J*, Vol. 68, No. 3, March 1975. 3. Bevins BB, Meeker WR, and Griffen WO; "The Importance of Histologic Classification of Carcinoma of the Gallbladder"; *Amer Surg*, Vol. 41, No. 3, March 1975.

# Acute Spigelian Hernia

## An Unusual Complication of Cardiopulmonary Resuscitation

GEORGE F. BROCKMAN, M.D. AND GEORGE H. RODMAN, M.D., F.A.C.S.  
GREENVILLE, KENTUCKY

A case of Spigelian herniation occurring in a trainee in cardio-pulmonary resuscitation is reported. There is included a brief review of the history and causative mechanism for this type of ventral hernia, and a speculative improvement in the technique of resuscitation is offered.

A 58-year-old plethoric Caucasian mine superintendent, weight 93 Kgs, height 165 cm, presented with a complaint of abdominal pain, of abrupt onset, initially appearing while he was receiving instruction in cardiopulmonary resuscitation at a mine First Aid Course.

At the moment of onset, he was straining busily in thoracic compression for cardio-pulmonary resuscitation of a plastic model, in which fluid simulating blood circulates through plastic tubing, to confirm the adequacy of cerebral perfusion. The compression required is very realistically comparable to that necessary in a human patient.

The initial pain was described as excruciating, constant, without wave-like characteristics, but spontaneously resolving after two hours, to be followed by a residual feeling of soreness in the left abdominal wall. At the time of examination, approximately 18 hours after the onset, there was no hernial sac, but a tender apparent defect in the abdominal wall was noted, at the approximate location of McBurney's point, as it is customarily described on the right abdomen.

The patient elected to have the defect repaired. A lateral incision at the outer border of the rectus sheath was used to expose the fascia in layers. A defect approximately 3 cm. in diameter was identified in the

posterior fascia, and closed appropriately. The post-operative course was uneventful.

It seems highly unlikely that Adrian van den Spieghel ever actually saw a hernia of the character that has been named for him. Flemish born, he was professor of anatomy at the University of Padua. Through careful dissection, he was able to make the first identification of the *linea semilunaris* of the lower abdominal wall. This he described as a fibrous band joining the rectus sheath with the fascia of the external oblique, internal oblique and transverse muscles, extending from the ninth costal margin along the lateral border of the rectus abdominus muscles to the pubic tubercle. Herniation through a defect in this fascia was first recorded by La Chausse<sup>1</sup> in 1746 in his classification of the ventral herniae. Klinklosch<sup>2</sup> was the first to refer to this rupture as a "*Spigel linea herniae*", in his classification of the ventral herniae.

There is extensive literature on the subject of spigelian hernia, although the world total of reported cases is apparently something under 500. There have been investigations of the defect that leads to herniation. Sir Ashley Cooper<sup>3</sup> in 1804 was the first to suggest that spontaneous lateral herniae emerged through a vascular hiatus. Others<sup>4,5,6,7</sup> have ascribed the defect to an area of congenital malformation, possibly associated with fat penetration of the aponeurosis.

The precipitating mechanism has generally been associated with increased intraabdominal pressure, particularly with an abrupt increase by strain. Persistent coughing, pregnancy and ascitic fluid distention of the abdomen have been identified in some cases. Patients have been approximately equally distributed between male and female. Patients have ranged in age from six days to 80 years, although the majority have been in the third to fifth decade. In almost all cases, the patient is described as being short and obese.

From the Greenville Clinic, Greenville, Ky.



## Acute Spigelian Hernia— Brockman and Rodman

The strenuous thoracic compression necessary for maintenance of adequate perfusion not only produces occasional rib fractures, but is very demanding of the resuscitator. It has been found that a more consistent effort can be made by less physically vigorous resuscitators if they step on the victim's chest with the bare heel. This technique is investigational and has no official sanction.

**References** 1. La Chausse BI, Chirurg de Hernia Ventral. *Haller Disput Chir Selecta*, tom iii, 1746. 2. Klinkosch. Cited by Halloway, JK Spontaneous lateral ventral hernia. *Ann Surg*, 75:677, 1922. 3. Read RC Observations on the Etiology of Spigelian Hernia. *Ann Surg* 152:1004, 1960. 4. Bailey D Spigelian hernia, report of five cases and review of the Literature. *Brit J Surg*, 44:502, 1957. 5. River LP Spigelian Hernia *Ann Surg*, 116:405, 1942. 6. Weiss Y, Lernau OZ, and Nissan S, Spigelian Hernia. *Ann Surg* 180:836, 1974. 7. Olson RO and Davis WC, Spigelian Hernia: Rare or Obscure? *Amer J Surg* 116:842, 1968.

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Brief Summary

**INDICATION:** Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

**CONTRAINDICATIONS:** Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

**WARNINGS:** If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle, the patient should therefore be cautioned accordingly. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychological dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

**PRECAUTIONS:** Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

**ADVERSE REACTIONS:** *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

**DOSAGE AND ADMINISTRATION:** Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in mid evening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

**OVERDOSAGE:** Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phenitamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of April, 1976

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**References:** 1. Citations available on request from Medical Research Department, MERRELL-NATIONAL LABORATORIES, Cincinnati, Ohio 45215. 2. Hoekenga, M.T., O'Dillon [Dillon], R.H., and Leyland, H.M. A comprehensive review of diethylpropion hydrochloride. In, *Central Mechanisms of Anorectic Drugs*, S. Garattini and R. Samanin, Ed., New York, Raven Press, 1978, pp. 391-404

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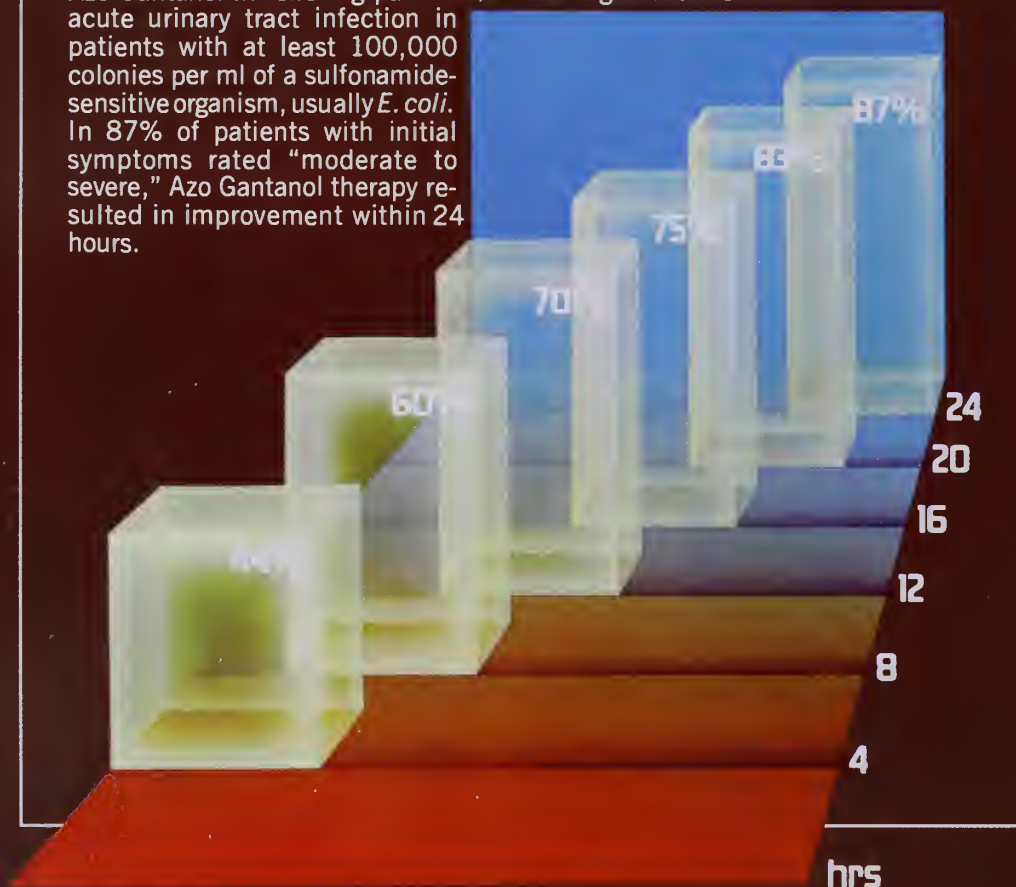
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**Indications:** In adults, urinary tract infection complicated by pain (primarily pyelonephritis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. Not to be used without fully coordinating *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Measure sulfonamide blood levels to determine if increasing frequency of resistant organisms is occurring. Variations may occur; 20 mg/100 ml should be the maximum total level.

**Contraindications:** Children below age 12; sulfonamide hypersensitivity; pregnancy at any time, including during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hematuria, and pyelonephritis of pregnancy.

**Warnings:** Safety during pregnancy not established. Deaths from hypersensitivity reactions, aplastic anemia, and other blood disorders have been reported and early clinical signs include fever, pallor, purpura or jaundice, and indicate serious blood disorders. Frequent urinalysis with microscopic examination is recommended during sulfonamide therapy.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, severe bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria or stone formation.

**Adverse Reactions:** *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, hemolytic anemia, purpura, thrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrosis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection); *sensitization*, arthralgia and allergic myalgia; *G.I. reactions* (nausea, emesis, abdominal pain, hepatitis, diarrhea, anorexia, pancreatitis, stomatitis); *CNS reactions* (headache, paresthesia, neuritis, mental depression, convulsions, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, nephrosis with oliguria and anuria, pericarditis, nodosa and L. E. phenomenon). Due to chemical similarities with some goitrogenic uretics (acetazolamide, thiazides) and with glycemic agents, sulfonamides have caused instances of goiter production, diuresis and glycemia. Cross-sensitivity with these agents may exist.

**Dosage:** Azo Gantanol is intended for the painful phase of urinary tract infections. **Adult dosage:** 2 Gm (4 tabs) initially, then (2 tabs) B.I.D. for up to 3 days. If pain is caused by other than infection should be considered. After relief of pain has been obtained, treatment with Gantanol (sulfamethoxazole) should be considered.

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# A Clinical Approach to the Choice of Antimicrobial Agents, Case Number 10: Atypical Pneumonia

PATRICIA A. BARNWELL, B.S., MARTIN J. RAFF, M.D. AND JULIO C. MELO, M.D.  
LOUISVILLE, KENTUCKY

This is the tenth in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choice of antimicrobial agents and explanations of why the authors choose one as the best agent.

A 15-year-old white male presents with a one-week history of a dry, hacking cough, fever to 101°F, headache, and muscle aches. His parents note that he has been extremely listless. There is no history of asthma or other chronic respiratory illnesses, and no other family members have been ill. About three weeks prior to the onset of symptoms, the patient accompanied a cub scout pack on a weekend camping trip. At that time two of these boys had symptoms of incipient upper respiratory illness, *i.e.*, mild pharyngitis, rhinorrhea, and a feverish sensation.

On physical examination he is obviously ill with pulse 90/min.; temperature 100.6°F; respirations 20/min.; and blood pressure 108/70 mm Hg. Pertinent findings include erythema of both tympanic membranes and the posterior pharyngeal mucosa. There are fine rales in the left lung base without signs of consolidation or effusion. The remainder of the physical examination is unremarkable.

The WBC count is 6,700/mm<sup>3</sup>, with 76% neutrophils, 5% bands, 16% lymphocytes, and 3% mono-

cytes. Chest x-ray discloses patchy infiltrates in the left lower lobe. The most likely diagnosis at this point is:

- A. Pneumococcal pneumonia;
- B. Mycoplasmal pneumonia;
- C. Staphylococcal pneumonia;
- D. Pseudomonas pneumonia;
- E. Infectious mononucleosis.

**Answer: B.** The most likely diagnosis is "atypical pneumonia" due to *Mycoplasma pneumoniae*. Intra-familial spread is classical for mycoplasmal pneumonia, with secondary cases occurring two to three weeks or more after the index case becomes symptomatic. The history of close exposure to other individuals with respiratory illnesses about three weeks prior to the onset of a dry cough, fever, headache, and malaise is therefore strongly suggestive of infection with *M. pneumoniae*.<sup>1,2</sup> This occurs because this organism is poorly communicable and requires close contact over a prolonged duration for transmission.

Erythema of one or both tympanic membranes is a frequent concomitant of *M. pneumoniae* infection, and some form of otologic complaint is present in up to one third of patients who develop pneumonia with this agent.<sup>1</sup> Although bullous or hemorrhagic myringitis is the otologic manifestation classically associated with mycoplasmal infection, it is an infrequent finding in most series involving adult patients.<sup>3</sup>

A normal WBC count is typical of *M. pneumoniae* pneumonia, occurring in 75.9% of cases described in one review.<sup>1</sup> Documentation of *M. pneumoniae* infection requires cultural identification of the organism or rising titers of specific circulating antibody. Although cold agglutinins are not specific for *M. pneumoniae*, their presence is suggestive of infection with this agent, and this test is more readily available in the routine hospital laboratory.

From the Section of Infectious Diseases, Department of Medicine, The University of Louisville School of Medicine, P.O. Box 35260, Louisville, Ky. 40232.



## ATYPICAL PNEUMONIA—Barnwell, Raff and Melo

A simple bedside procedure can rapidly assess the presence of cold agglutinins,<sup>4</sup> which appear during the second or third week of illness.<sup>5</sup> Approximately one ml of the patient's freshly drawn blood is placed in a tube containing citrate or oxalate anticoagulant (a prothrombin tube is adequate). The tube is chilled in an ice water bath for one to two minutes and observed for erythrocyte clumps while rotating in a **horizontal** position. Dissociation of clumps with warming, followed by their reappearance with re-chilling is strongly suggestive of the presence of cold agglutinins associated with *M. pneumoniae* infection. The cold agglutinin titer must be 1:64 or higher for this rapid test to be positive. It should be noted however, that since therapy is most effective when instituted during the first week of the disease, the diagnosis should be established on clinical grounds and then confirmed retrospectively by the procedures mentioned.

It is unlikely that this patient has pneumococcal pneumonia in view of his relatively benign course with low-grade fever, lack of sputum production, and absence of consolidation. The typical presentation of pneumococcal pneumonia includes the abrupt onset of a single shaking chill, pleuritic chest pain, and a cough productive of blood-tinged or rusty sputum. Staphylococcal pneumonia is also abrupt in onset with repeated chills, high fever, cough, usually with sputum production, pleuritic pain, and dyspnea. Pseudomonas pneumonia would virtually never occur in an otherwise healthy outpatient who has not been receiving antibiotics.

Appropriate therapy for mycoplasmal pneumonia would include which of the following:

- A. Erythromycin, 500 mg. p.o. q 6 hr.;
- B. Cephalexin (Keflex®), 250 mg. p.o. q 6 hr.;
- C. Ampicillin, 250 mg. p.o. q 6 hr.;
- D. Tetracycline, 500 mg. p.o. q 6 hr.;
- E. No treatment.

**Answer: A or D.** Both erythromycin and tetracycline are effective in treating mycoplasmal pneumonia. The choice between these two agents should depend on other considerations in the differential diagnosis; i.e., if pneumococcal pneumonia or Legionnaire's Disease is also being considered, one would choose erythromycin; whereas if the differential lies between mycoplasmal pneumonia and Q-fever or psittacosis, tetracycline would be more appropriate.<sup>3</sup> Tetracycline may also be effective in patients with Legionnaire's Disease. Therapy should be continued for at least two weeks.

B and C are incorrect because cell-wall-active agents such as penicillins and cephalosporins are ineffective against *M. pneumoniae*, which lacks a cell wall. E is incorrect because appropriate therapy greatly reduces the duration of clinical illness,<sup>3,6</sup> even though drug-sensitive organisms can be isolated from the patient after two weeks of treatment.<sup>3</sup>

The patient was begun on erythromycin and defervesced gradually over the next three days. A repeat chest x-ray one week later revealed partial resolution of the left lower lobe infiltrate; however, examination at that time disclosed mild scleral icterus, and the patient reported several episodes of dark urine. Hematocrit had fallen from 44% one week previously to 35%. Total bilirubin was 3.2 mg% (direct = 0.6 mg%, indirect = 2.6 mg%). Which of the following is/are correct:

- A. This is an idiosyncratic reaction to erythromycin, and the drug should be discontinued;
- B. Clinically significant hemolytic anemia is a frequent concomitant of *M. pneumoniae* infection, since this organism is an intra-erythrocytic parasite;
- C. The cold agglutinin titer at this time will be elevated;
- D. The patient is developing hepatitis;
- E. All of the above.

**Answer: C.** When hemolysis occurs, it coincides with the peak titer of cold agglutinins.<sup>7</sup> This typically occurs during the second to fourth week of illness, at a time when the pneumonic process may be resolving. The cold agglutinin titer is usually over 1:500 in patients with clinically significant hemolytic anemia; however, serious hemolysis has been reported in patients with lower titers.<sup>8</sup> Antibiotic therapy does not appear to alter the immunologic response to *M. pneumoniae* infection;<sup>6</sup> thus hemolytic anemia may occur in an appropriately treated patient.

Although hemolytic anemia can occur as an idiosyncratic reaction to antibiotics, it would be extremely rare with erythromycin. Hepatotoxicity is occasionally associated with erythromycin estolate,<sup>9</sup> but the presence of a falling hematocrit and a high indirect bilirubin are not consistent with this diagnosis. Hepatitis may occur as a concomitant of *M. pneumoniae* pneumonia, but this is unusual, and the pattern of bilirubin elevation, the absence of hepatic enzyme rises, and the presence of a falling hematocrit are all more suggestive of hemolysis.

# ATYPICAL PNEUMONIA—Barnwell, Raff and Melo

Choice B is incorrect because hemolysis due to *M. pneumoniae* infection is rarely of clinical significance, and this organism is not an intra-erythrocytic parasite. The hemolytic anemia, even when clinically manifest, is usually self-limiting and does not require therapeutic intervention.

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*Manuscripts will be accepted for consideration with the understanding that they are original and are contributed solely to The Journal. They should be submitted in duplicate, typed with double spacing, and should usually not exceed 2,000 words in length. The transmittal letter should designate one author as correspondent and include his complete address and telephone number.*

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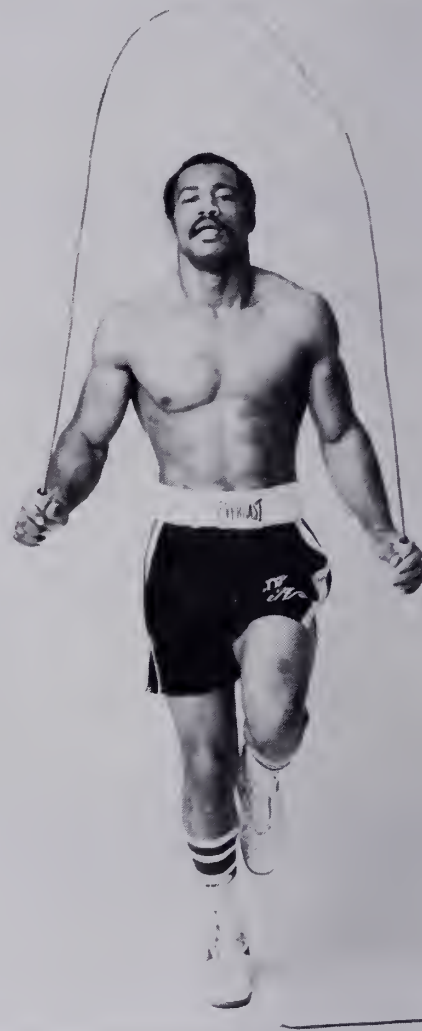
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## EDITORIAL

**H**OW can we deal with the feelings we have toward our patients. The patients we like will certainly be easier for us than those we dislike. Physicians are frequently drafted into caring for patients whom they dislike. The Freudian analytic model would suggest that we examine the transference of this relationship. However, a recent article by Goodwin, et al., suggests that we might profit by examining our disliked patients for organic brain disease or psychopathology. In a series of lupus patients, they found that physician dislike was frequently associated with serious psychiatric impairment.

Over the years psychiatric liaison services have emphasized our attention to the patient's psychiatric symptoms as clues to types of pathology. Instead of disregarding feelings, the good clinician senses the patient is communicating meaningful symptoms. Belligerence, withdrawal, poor social hygiene, forgetfulness, inappropriate mood, cyclical personality, failure to cooperate with appointments or therapeutic regimens are frequent reasons that physicians give for disliking their

patients. Interestingly, these are also the symptoms seen in patients with serious psychopathology — depression, schizophrenia, manic depressive disorders, etc. Organic brain syndromes such as those resulting from systemic lupus erythematosus, cancer, drug intoxications or cerebrovascular disease could likewise manifest those symptoms.

Diagnoses are the synthesis of the history, physical examination and laboratory analysis. Certainly examining our patient's behavior and our response to it should be incorporated into our diagnostic armamentarium. To discredit our "gut feeling" would sacrifice an important avenue to making many diagnoses.

We physicians are human and possess an emotional repertoire. Utilize what you feel emotionally as well as physically.

SZS

**Reference** Goodwin JM, Goodwin JS, Kellner R. Psychiatric Symptoms in Disliked Medical Patients. *JAMA* 241:1117-1120, 1979.

## What would Osler say?

**I**T is said that "... Osler revolutionized medical education by bringing the student to the patient's bedside on the wards, using the patient himself as the primary vehicle for teaching."<sup>1</sup> Without exception, physicians of today have acquired their medical knowledge and skills under this Oslerian principle. Implicitly, it has been assumed that examination of patients by physicians-in-training did not violate any patient rights.

Now, with promulgation of "The Declaration of Patient Rights," one must necessarily review the relationship between patient and medical student. Certainly the right to refuse physical examination or treatment is a patient's prerogative. How explicit must consent be, however, before an otherwise cooperative patient permits a sophomore medical student to perform his first cardiac auscultation?

Every patient deserves the best of available medical

care. Does participation of properly supervised trainees jeopardize the quality of care? Where will physicians acquire their skills, if not at the bedside?

Proper exposure of medical students to patients is mandatory and the medical consumer must be assured of this. Significant limitation of teaching resources would put us back to times before Osler. That model for all physicians expressed the matter so succinctly: "To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all."<sup>2</sup>

GRS

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# GRAND ROUNDS



University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

## Nongonococcal Urethritis

Nongonococcal urethritis (NGU) is the most common sexually transmissible disease seen in developed countries.<sup>1</sup> Although formerly called nonspecific urethritis (NSU) the term NGU is now employed because of increasing evidence for specific microbiological etiologies.

### Epidemiology

Because of the lack of world-wide systematic recording and because several microorganisms can produce this disease, the epidemiology of NGU is not completely known. In Great Britain, where all cases of urethritis have been reported since 1951, NGU has been more common than gonococcal urethritis since 1965. In the United States NGU is not an officially reportable disease, but it seems to be as common as gonococcal urethritis.<sup>2</sup> The ratio of cases of NGU to those of gonococcal urethritis in United States Navy personnel is 1.3:1.<sup>3</sup> The age distribution of patients with NGU is similar to that for those with gonococcal urethritis with most patients being between the ages of 10 and 29.

Table I illustrates some of the epidemiologic characteristics of NGU and gonococcal urethritis in men.<sup>4,5</sup> As shown, most cases of NGU occur in educated, heterosexual white males of higher socioeconomic groups.<sup>1</sup>

### Etiology

Widespread interest in chlamydial infections of the genitourinary tract is fairly recent, although the association of these organisms with genital tract disease has a long history. *Chlamydia trachomatis*, an obligate intracellular parasite, has now been established as the etiologic agent of NGU in from 40 to 50% of all

TABLE 1

Epidemiologic characteristics of Nongonococcal Urethritis (NGU) compared to Gonococcal Urethritis (GU) in men

- More patients with NGU are unmarried
- More patients with NGU are white
- Educational level is higher when compared to patients with GU
- More NGU patients are employed than patients with GU
- More NGU patients are students than patients with GU
- Socioeconomic levels of NGU patients is higher than for patients with GU
- Mean age at first intercourse higher for NGU patients
- Number of sexual partners is lower for NGU patients
- Age distribution is similar for the two groups
- Past history of venereal disease is similar for the two groups.

cases.<sup>4,6,7</sup> *Chlamydia trachomatis*, serotype L<sub>1</sub>, L<sub>2</sub>, and L<sub>3</sub> cause lymphogranuloma venereum. Serotypes A, B, Ba, and C cause hyperendemic blinding trachoma and serotypes D, E, F, G, H, I, J, and K cause inclusion conjunctivitis, nongonococcal urethritis, cervicitis, salpingitis, proctitis, epididymitis and pneumonia of newborns.<sup>7</sup>

A second organism which has been implicated as a cause of NGU is *Ureaplasma urealyticum* (T-strain mycoplasma). The true pathogenicity of this organism in this disease has been controversial. Some studies have shown a high frequency of asymptomatic genital carriage in both men and women.<sup>4</sup> However, there seems to be some evidence that some cases of chlamydia-negative NGU are due to *U. urealyticum*.<sup>6</sup>

The etiology of NGU in 20 to 30% of the cases caused by neither *C. trachomatis* nor *U. urealyticum* is not completely known. Many different types of microorganisms have been isolated from the urethras of symptomatic and asymptomatic patients, and these are listed in Table II. Their causative role in the pathogenesis of NGU remains to be established.

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## Clinical Presentation

Differentiation between NGU and gonococcal urethritis cannot be made entirely from the clinical presentation. A study of 400 men with urethritis, 216 of whom had NGU, demonstrated that dysuria or discharge had usually been present for several days.<sup>5</sup> The discharge, which may occur without dysuria, is usually clear, thin and mucoid in consistency and is demonstrable after penile stripping. Often, patients may simply note staining of their undergarments. Symptoms that were seen commonly included urgency, frequency and genital pruritis. Fever, flank pain, hematuria and impotence were not seen in this group of patients.<sup>5</sup>

## Diagnosis

The diagnosis of nongonococcal urethritis is basically one of exclusion, and is established by:

- a. the demonstration of urethritis by the presence of abnormal urethral exudate. If gross urethral exudate is not present, the demonstration of leukocytes in the initial 15 ml of voided urine is diagnostic. (In the centrifuged specimen, the presence of 20 or more leukocytes in at least two of five fields has been considered to be abnormal;<sup>6</sup> and
- b. ruling out the presence of *Neisseria gonorrhoeae*. As shown by Jacobs and Kraus, in 85% of cases the diagnosis can be made with 98% specificity by looking at gram stains of urethral exudate.<sup>5</sup> If typical intracellular gram-negative diplococci are seen the diagnosis of gonococcal urethritis has been established. A negative smear, one that does not show typical intracellular organisms, will establish the diagnosis of NGU with 98% specificity. In the other 15% of cases the gram stain will not be diagnostic, and cultures are necessary to rule out the presence of *Neisseria gonorrhoeae*. Chlamydial and mycoplasmal cultures are not routinely performed by most diagnostic microbiology laboratories in this country.

The major differential diagnosis is of course that of gonococcal urethritis. Several clinical characteristics are useful in distinguishing gonococcal urethritis from NGU.<sup>5</sup> These are:

- a. Gonococcal urethritis is usually associated with both dysuria and discharge, discharge alone being less frequent and dysuria alone occurring only rarely.
- b. The discharge of gonococcal urethritis is almost always purulent and spontaneous (i.e. does not require penile stripping). No more than 5% of

TABLE II

Organisms isolated from patients  
with chlamydia and mycoplasma-negative NGU

*Trichomonas vaginalis*  
*Herpesvirus hominis*  
*Lactobacilli*, *Streptococcus viridans*, *Haemophilus vaginalis*,  
*Staphylococcus epidermidis*, diphtheroids.  
A variety of anaerobic bacteria including *Bacteroides* sps.,  
*Clostridium difficile*.  
*Candida* sps.

TABLE III

Differential Diagnosis

|                        | Nongonococcal           | Gonococcal                       |
|------------------------|-------------------------|----------------------------------|
| Dysuria and discharge  | 38 %                    | 71 %                             |
| Discharge only         | 47 %                    | 27 %                             |
| Dysuria only           | 15 %                    | 2 %                              |
| Discharge              | Thin, mucoid,<br>scant  | Purulent, profuse<br>spontaneous |
| Symptoms               | 46 % < 4 days           | 76 % < 4 days                    |
| Previous urethritis    | common                  | common                           |
| Diagnosis              | Gram stain &<br>culture | Gram stain &<br>culture          |
| Gram stain correlation | 98 %                    | 98 %                             |

patients who present with spontaneous purulent urethral discharge will be found to have NGU.

- c. Gonococcal urethritis is usually a more acute disease, as shown by the fact that 76% of patients with gonococcal urethritis are seen by the doctor within four days after the onset of symptoms, while only 46% of patients with NGU are seen within the same period of time. Despite this there is some overlap in the clinical presentation of these two conditions, so it could be difficult to accurately distinguish between these two entities by history and physical examination alone. See Table III.

## Treatment

NGU has had a bad reputation for being difficult to treat and for having an unpredictable relapse rate. Since chlamydiae are responsible for at least 50% of the cases of NGU, the drug of choice is tetracycline. This compound should be given in a dose of 250 mg q.i.d. for 21 days or 500 mg q.i.d. for at least seven days. Erythromycin is also effective at the same dosages. Penicillins and cephalosporins are **not** effective.<sup>7</sup> In addition, at least 70% of cases of post-gonococcal urethritis are due to chlamydiae,<sup>8</sup> and tetracyclines are also the drug of choice for this condition.

It is important to realize that all of the patient's sexual partners should be examined and treated. It is also advisable to avoid alcohol during treatment since there is evidence that alcohol stimulates urethral discharge.<sup>1</sup> Abstinence from further sexual activity is necessary until the condition has been fully treated. If all



of these measures are followed, about 80% of men will be symptom free at the end of a three week follow-up period.<sup>12</sup> However, the recurrence rate may approach 40% by six weeks.<sup>9</sup> Some of these who fail to respond may have failed to take medication; sexual partners may not have been treated; or patients may have had intercourse with the same or another infected partner. Another course of tetracycline is then recommended.

If patients have followed all recommendations and are treatment failures it is recommended that they be examined for trichomonas, and if this is found, that they be treated. It has been empirically suggested that another course of therapy, with erythromycin instead of tetracycline, may be effective.<sup>1</sup> However, there is a small number of patients who continue to have symptoms despite all of these measures. Such patients may require complete urologic evaluation for urethral strictures, chronic prostatitis or other diseases. Finally, some of these patients may just need observation without treatment.

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JULIO C. MELO, M.D.

**Indications and Usage:** Symptomatic relief of anxiety, tension, agitation, irritability and insomnia associated with anxiety neuroses and transient situational disturbances; anxiety associated with depressive symptoms and as a treatment of symptoms of anxiety if such symptoms are a significant feature of functional or organic disorders, particularly gastrointestinal or cardiovascular

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

**Warnings:** Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid over-sedation

Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions

Observe usual precautions with impaired renal or hepatic function.

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component

Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (approximately 6 times the maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatric patients requires caution and frequent monitoring for symptoms of upper GI disease

Safety and effectiveness in children under 12 years have not been established

**ESSENTIAL LABORATORY TESTS** Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy

**CLINICALLY SIGNIFICANT DRUG INTERACTIONS** Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

**CARCINOGENESIS AND MUTAGENESIS:** No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

**PREGNANCY** Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chloridiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug.

In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide

**NURSING MOTHERS** It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring of vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined

**Ativan<sup>®</sup> (lorazepam) for Anxiety**

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**How Supplied:** 0.5, 1.0 and 2.0mg tablets.

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# Why one benzodiazepine and not another?

Are you concerned about long-acting metabolites? Many clinicians, as well as pharmacologists, are beginning to draw attention to this problem (see New England Journal of Medicine, April 5, 1979).

In contrast to some older benzodiazepines, Ativan (lorazepam) does not give rise to long-lasting active metabolites. As with all benzodiazepines, you should follow the usual precautions concerning co-administration with other CNS depressants and warn your patients against operating dangerous machinery and motor vehicles.

However, it is noteworthy that Ativan showed no clinical evidence of accumulation even when given in high doses over periods up to 6 months. The half-life of free lorazepam is about 12 hours; steady-state serum levels are attained in 2-3 days. Comparable data for diazepam: 20-50 hours and at least 7-10 days. (The pharmacokinetic profile of a drug can define such characteristics as absorption, distribution, metabolism and elimination but cannot, at present, be directly related to its therapeutic effectiveness.)

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See important information on preceding page.

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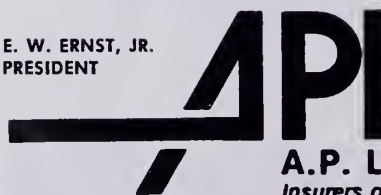
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# **The Beginning of the Medical School of the University of Kentucky—The Political and Scientific Background**

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## **Introduction**

In order to understand the controversy over the establishment of the Medical School of the University of Kentucky, one must be aware of the financial plight of medical education in Kentucky in the 1940's as well as the political climate.

The University of Louisville School of Medicine had furnished up to seventy-five percent of the physicians in Kentucky for almost a century. The school had come upon hard times from a financial standpoint.

Doctor Carl Howard of Glasgow, a loyal alumnus, took the lead in an effort to obtain money from the legislature for the University of Louisville School of Medicine. He knew the ways of politics. In the Democratic gubernatorial primary in 1947, he obtained a commitment from candidate Earle Clements to help the University of Louisville. With his strong support, Earl Clements was nominated and later elected Governor of Kentucky. Shortly after Clements was inaugurated, Doctor Howard called a meeting of representative physicians from all parts of the state to press the claim for help for the University of Louisville.

As a result of this meeting, a bill was passed early in the 1948 Legislative Session to establish a Medical Research Commission to contract with the University of Louisville for medical research. This subterfuge to circumvent the Kentucky Constitution, which prohibited appropriations to a private institution, was worked out by then Lt. Governor Lawrence Wetherby, a native of Jefferson County and a graduate of the

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University of Louisville, together with State Senator Louis Cox of Frankfort. The Legislature appropriated \$75,000 a year for two years to the Medical Research Commission.

This appropriation was a great shot-in-the-arm for the University of Louisville Medical School and was increased every two years when the Legislature met. Doctor Howard's often repeated motto was "You can't continue to milk a cow without feeding her."

## **The Drive for a Medical School at the University of Kentucky**

For several years the physician in charge of the health service at the University of Kentucky, Doctor John S. Chambers, a graduate of the University of Michigan Medical School, had urged Lexington physicians to work for a School of Medicine at the University of Kentucky in Lexington. His voice was finally heard by some Lexington physicians, headed by Francis Massie, Ed Ray, and Coleman Johnston. As in all groups of physicians, there were those who were opposed to a Medical School in Lexington.

In 1951 these three Lexington physicians appeared before the Board of Trustees of the Kentucky Medical Association, of which I was a member, to present their case and seek support for the project. Doctor Massie, a prominent Lexington surgeon, presented a strong case listing three general hospitals, a Veterans Administration Hospital, and a Federal Narcotic Hospital which could be used to train students, interns, and residents. He also described the referring area around Lexington which should support a **University Hospital**. Doctor Johnston, another surgeon and then President



of the Fayette County Medical Society, was also very affective in soliciting support for the medical school, as was Doctor Ray, a leading urologist in Lexington. Doctor Chambers, of course, was furnishing data and working steadily for the project.

Most of the Board of Trustees and the Louisville group were strongly opposed to the project. Their opposition was largely based on the fear that the University of Louisville School of Medicine would lose the state appropriation described above, although strong assurance from the Lexington group was given that they would oppose any loss of state money for the University of Louisville. Doctor Massie said, "Look at the physical state of your medical school and General Hospital! What you need is competition! A school at Lexington will put you to work!" When one looks at the magnificent University of Louisville Health Sciences Center, the Price Institute of surgical research, and the Medical Center hospitals including the University Hospital now being built, one is convinced that Doctor Massie was right about competition.

#### **The Political Angle**

The drive for a school of medicine at Lexington had gained such momentum that Governor Lawrence W. Wetherby, who succeeded Governor Clements in 1950, appointed an advisory committee on Medical Education in January 1953 "To study together with the Legislative Research Commission the need and the cost of a School of Medicine at the University of Kentucky in Lexington".

This committee was carefully chosen to represent all areas of the state, the members and their medical schools were as follows: Edward H. Ray, Lexington (Tulane University), J. Vernon Pace, Paducah (Vanderbilt University), R. Haynes Barr, Owensboro (University of Pennsylvania), Clyde C. Sparks, Ashland (University of Louisville), Branham B. Baughman, Frankfort (University of Michigan).

Early in the year, Doctor Barr, who was President of the Kentucky Medical Association, died suddenly of a heart attack, and he was replaced on the committee by Doctor Clark Bailey of Harlan, the new President of the Kentucky Medical Association.

Doctor Ray was elected chairman and the committee went to work. The Legislative Research Commission obtained nationwide statistics on Medical Schools and Medical Education and then the committee made its final recommendations and long-range plans, which were as follows:

#### **Recommendations**

Assurance of adequate financial support is essential in the establishment of any state supported medical school if and when Kentucky establishes such a medical school financial support must be sufficient to create a fully approved and outstanding institution. The recommendations must be divided into two categories — a short range plan for the immediate need and a long range plan to meet the health requirements of the Commonwealth.

1. The committee, recognizing the importance of medical research in the improvement of health services to all, recommends a continuation of the appropriation to the Medical Research Commission which contracts with the University of Louisville for this service. As a result of this the University of Louisville has been able to substantially increase the number of Kentuckians studying medicine at that institution.
2. The Committee recommends that as a short range solution to Kentucky's physician shortage the Commonwealth contract for 25 spaces for new students each year in Southern Medical Schools outside Kentucky thru the Southern Regional Education Board for four years.
3. In recognition of the outstanding contribution of the Rural Kentucky Medical Scholarship Fund in placing physicians in rural areas, the General Assembly should consider the expansion of that program.
4. The committee recommends that a school of medicine be established in Lexington as a part of the University of Kentucky as soon as finances permit and assure the construction of a grade A Medical School. The major essential elements of such a school are the following.
  - A. The construction of a teaching hospital with at least 500 beds.
  - B. The construction of a Medical Science Building sufficient to accommodate classes of 75 students each year.
  - C. Adequate residence halls for nurses, interns, and residents.
  - D. Assurance of obtaining an adequate and competent faculty.
5. The committee finally recommends that a committee be appointed by the Governor composed of individuals recommended by the Kentucky State Medical Association, the Deans of the medical schools and members of the General Assembly, to study the problem of indigent medical care in Kentucky, and work out a practical plan for determining the eligibility for admission to the University of Kentucky Hospital.

## Reference

Medical Education: Subtitle: Does Kentucky need a State supported Medical School? Prepared by Research Staff, Legislative Research Commission. Research Publication number 37 November 1953.

This was reported to the 1954 Legislature and no action was taken. As in every second Legislature in Kentucky, attention focussed upon the Governor's race of the following year. Already on the horizon, former Governor A. B. Chandler had announced his intention of running for a second term as Governor in opposition to the candidate supported by the Wetherby-Clements group, Court of Appeals Judge Bert T. Combs.

Since Governor Chandler lived in Versailles, only a few miles from Lexington, it was very easy for the Lexington physicians to obtain a commitment from him to support a medical school there.

Governor Chandler defeated Judge Combs for the nomination in a heated Democratic primary and was easily elected Governor for a second time, 20 years after his first election.

The Board of Trustees of the University of Kentucky authorized a school of medicine and the 1956 Legislature Appropriated funds for it. The Legislature also continued the previous appropriation for medical research for the University of Louisville.

On a cold, rainy December day, in 1957, in a field off Rose Street, part of the Department of Agriculture's ground was broken for the Medical Center of the University of Kentucky.

The 1958 Legislature made an appropriation of \$438,000 to the University of Kentucky Medical Center and also voted to appropriate \$500,000.00 per year for the Medical Education Program, which included the University of Louisville.

After an extensive search by a University of Kentucky Committee, William R. Willard, M.D. of the University of Syracuse was employed in 1956 as Dean of the College of Medicine and University Vice President for the Medical Center. One of his primary jobs was to obtain a faculty. Two of his first and very important choices were Doctor Ben Eiseman from the University of Colorado, a Harvard graduate, as chairman of the Department of Surgery, and Doctor Edward Pellegrino, a graduate of New York University as chairman of the Department of Medicine. These men in turn picked some outstanding young men for their associates and staff members. Doctor Willard in addition to Doctors Eiseman and Pellegrino, recruited

several other important men. Among them were William Knisely, Professor of Anatomy; George Schwert, Professor of Biochemistry; Kurt Deuschle, who established the first Department of Community Medicine at Kentucky and put community medicine on the map. Robert Straus had the first Department of Behavioral Science in a United States Medical School. Howard Bost, who came from Syracuse with Doctor Willard, had the first Ph.D. in Medical Economics in the United States and proved a real statesman in medical policy. Richardson Noback, another Willard recruit, subsequently became the first Dean of the new Medical School at the University of Missouri at Kansas City. Another important appointment some time after the above two was that of Peter P. Bosomworth, M.D., Chairman of the new Department of Anesthesiology. Doctor Bosomworth received his training at Ohio State University, and in recent years has become Vice President for Medical Affairs. As evidence of the quality of these men, below are listed the surgeons and positions to which they were subsequently elected:

Frank C. Spencer, Chairman, Department of Surgery, New York University; Rene Menguy, Chairman, Department of Surgery, University of Rochester, New York; Ben Rush, Chairman, Department of Surgery, of the new University of New Jersey; Loren Humphrey, Chairman, Department of Surgery, University of Kansas; Charles Wilson, Chief of Neurosurgery, University of California at San Francisco; Ward O. Griffen, from the University of Minnesota, who succeeded Doctor Eiseman and is presently the very outstanding Chairman of the Department of Surgery at the University of Kentucky. Being a surgeon, I am far more familiar with the Department of Surgery than the Department of Medicine.

In 1959, Bert Combs was elected Governor and inherited the responsibility of financing the new medical school at the University of Kentucky. During his administration and that of his designated successor, Governor Edward Breathitt, the Medical Center was completed at a total cost of \$16,000,000. The Medical Center was named for Governor Chandler although the majority of financing was done by the administrations of Governors Combs and Breathitt. The first class entered the medical school in the fall of 1960 and graduated in 1964.

In 1956 additional money was needed and a Medical Foundation was formed, under the leadership of some civic leaders in Lexington, including especially Stephen Watkins, an engineer; Arnold Hanger, the head of a national construction firm, the Mason-Hanger Com-



pany, who built, among other projects, the Grand Coulee Dam; Guy Huguelet, head of the Greyhound Bus Company, and others.

Today in Kentucky we have two great Medical Centers, the University of Kentucky in Lexington and the University of Louisville. Town and Gown work together in both institutions. Much of the unusual cases referred from Eastern Kentucky go to Lexington and those from Western Kentucky go to Louisville, a very satisfactory situation for the citizens of the Commonwealth. The two centers are not in competition but work together for the health of all Kentuckians. Both have national recognition in the Medical World. Doctor Massie's ringing challenge is forever true — competition is the stimulus to increased greatness.

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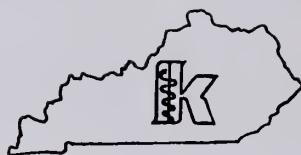
So, before you choose a new office telephone system, call in a South Central Bell Account Executive at no extra cost. And get the total story on Com Key systems.

**The system is the solution.**



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Physicians

## Kentucky Medical Insurance Company

Formed by the Kentucky Medical Association, following action by its House of Delegates, KMIC now stands ready to serve the professional needs of Kentucky physicians.

**KMIC** An opportunity for Kentucky physicians to ensure a continuing, stable source of **competitively** priced professional liability insurance.

**KMIC** An opportunity for Kentucky physicians to participate as a policyholder and shareholder in a stock insurance company.

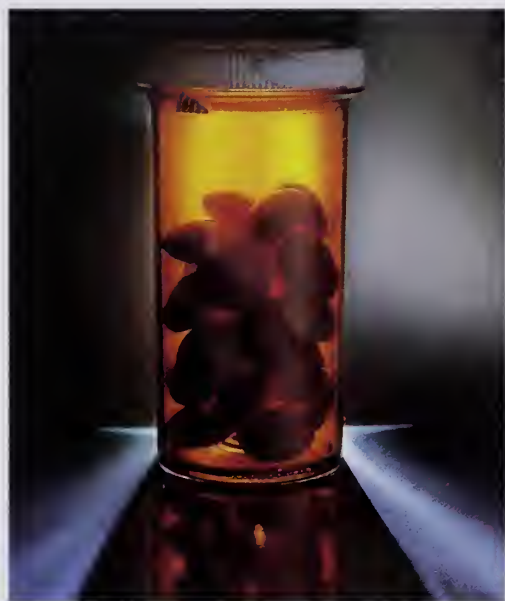
### FEATURING

- **Occurrence Policy**
- **Primary Limits:** Choice of **two** policies
  - \$100,000 per claim/\$300,000 aggregate per year
  - \$200,000 per claim/\$600,000 aggregate per year
- **Excess Coverage:** (Over \$200,000/\$600,000 only)
  - \$1 million per claim/\$1 million aggregate per year
  - (Through Physician Insurance Company of Ohio)
- **Tail Coverage** for previous "claims made" policies
- **Physician's Consent** required for settlement
- **Premium Financing Option**
- **Partnership and Corporation Coverage:**
  - Provided at no charge if all members are policyholders

### KENTUCKY MEDICAL INSURANCE COMPANY

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Louisville, KY 40232  
(502) 459-3400  
Call KMIC Toll Free 1-800-292-1858

The Upjohn Company  
announces  
a new  
indication for  
Motrin<sup>®</sup>  
(ibuprofen)





Motrin tablets  
400 mg  
Sig T q 4-6 h  
prn  
pain



# Motrin now proved an effective analgesic for mild to moderate pain

Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

| Time after drug administration (hour)                   |                           | .5           | 1             | 2             | 3             | 4             |
|---|---------------------------|--------------|---------------|---------------|---------------|---------------|
| Mean relief-of-pain scores*<br>(No. patients reporting) | Motrin 400 mg ibuprofen   | .89<br>(108) | 1.25<br>(108) | 1.36<br>(108) | 1.28<br>(107) | 1.19<br>(106) |
|   | Darvon 65 mg propoxyphene | .66<br>(100) | .99<br>(99)   | 1.13<br>(96)  | .99<br>(96)   | .80<br>(96)   |
| Statistical significance                                |                           | p<0.02       | p<0.01        | p<0.05        | p<0.02        | p<0.002       |

\*0 = No relief    1 = Partial relief    2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

**Motrin** 400<sup>TABLETS</sup>mg  
ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.



**Motrin®** (ibuprofen)

## now proved an effective analgesic for mild to moderate pain

**Motrin® Tablets** (ibuprofen, Upjohn)

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** Aspirin: used concomitantly may decrease Motrin blood levels. Coumarin: Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

### Adverse Reactions

**Incidence greater than 1%**

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,\* epigastric pain,\* heartburn,\* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,\* headache, nervousness. **Dermatologic:** Rash\* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

\*Incidence 3% to 9%.

**Incidence less than 1 in 100**

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

**Causal relationship unknown**

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

**Caution:** Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

MED B-4-S

**Upjohn**

THE UPJOHN COMPANY  
Kalamazoo, Michigan 49001 USA

**ALDORIL®**  
containing methyldopa and hydrochlorothiazide

TABLETS

### ALDORIL®-25

containing 250 mg ALDOMET® (Methyldopa, MSD)  
and 25 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS

### ALDORIL®-15

containing 250 mg ALDOMET® (Methyldopa, MSD)  
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TABLETS

### ALDORIL® D30

containing 500 mg ALDOMET® (Methyldopa, MSD)  
and 30 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

TABLETS

### ALDORIL® D50

containing 500 mg ALDOMET® (Methyldopa, MSD)  
and 50 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

**MSD**

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Merck Sharp & Dohme, Division of  
Merck & Co., Inc., West Point, PA 19486

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J9ART3

# BOOK REVIEWS

## Review of Physiological Chemistry

H. A. Harper, V. W. Rodwell and P. A. Mayes, *Lange Medical Publications*, 702 pages.  
Copyright 1979

The 1979 edition of the *Review of Physiological Chemistry* continues the review of biologic chemistry that has been extensively used for over 40 years. This book is constructed to be a comprehensive yet reasonably concise description of biochemistry as it pertains to the biological sciences.

This edition has added recent developments in molecular biology and chemistry. Evolution of this material has been integrated with classic biochemistry, especially in the latter clinical section of the book.

Information is concisely delivered; however the sections on muscle and epithelial tissue were very brief.

As in previous editions, the illustrations are plentiful and well situated, complementing the adjacent and ex-

planatory text. However, the many serpentine models of proteins (hormones particularly) taking up significant text areas and accomplishing no more than impressing the reader with their endless amino acids, should be edited. Excellent diagrams guide the reader through the numerous mazes found in biochemical information.

The student, reviewer, researcher or clinician will find this review excellent for a foundation in physiological chemistry. At its modest price, this book is a bargain of educational material.

STEPHEN Z. SMITH, M.D.  
Louisville, Kentucky

Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.



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An American Company

The irritable bowel\*...restless...easily  
disturbed... strikes when agitated



Tread softly.

# **PATHIBAMATE®** 200 Tablets 400 Tablets

Tridihexethyl Chloride 25 mg—Meprobamate 200/400 mg

Providing the highly effective, time proven antispasmodic activity of PATHILON® Tridihexethyl Chloride to relax the bowel, stop the pain...and the classic calming action of meprobamate to relieve anxiety.

\*The FDA has evaluated PATHIBAMATE as possibly effective as adjunctive therapy for this indication.

Please see BRIEF SUMMARY on following page.

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# PATHIBAMATE®

200 Tablets/400 Tablets

Tridihexethyl Chloride 25 mg.—Meprobamate 200/400 mg.

- **PATHILON®** Tridihexethyl Chloride stops spasm, relieves pain
- **Meprobamate** calms the patient

**INDICATIONS:** Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows: Possibly Effective: as adjunctive therapy in peptic ulcer and in the irritable bowel syndrome (irritable colon, spastic colon, mucous colitis, and functional gastrointestinal disorders), especially when accompanied by anxiety or tension. It should be used as an adjunct to other appropriate measures such as proper diet and antacids.

**Contraindications:** TRIDIHETHYL CHLORIDE: Allergic or idiosyncratic reactions to this or related compounds; glaucoma; obstructive uropathy (e.g., bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the G.I. tract (as in achalasia, paralytic ileus, pyloroduodenal stenosis, etc.); intestinal atony of the elderly or debilitated; unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. MEPROBAMATE: Acute intermittent porphyria; allergic or idiosyncratic reactions to it or related compounds (carisoprodol, mebutamate, tybamate or carbromal).

**Warnings:** TRIDIHETHYL CHLORIDE: In high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Do not treat diarrhea associated with ileostomy or colostomy with this drug. If drowsiness or blurred vision occurs, warn the patient not to engage in activities requiring mental alertness (operating motor vehicles or machinery) or to perform hazardous work. MEPROBAMATE: *Drug dependence:* Physical and psychological dependence and abuse have occurred. Carefully supervise dose and amounts. Avoid prolonged use to alcoholics and those with known propensity for taking excessive quantities of drugs. Sudden withdrawal after prolonged and excessive use may precipitate recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching, confusional states, hallucinosis, and rare convulsive seizures more apt to occur in those with CNS damage or pre-existent or latent convulsive disorders). Withdrawal symptoms usually begin within 12-48 hours after drug stoppage and cease within the next 12 to 48 hours. Reduce excessive and prolonged dosage gradually over one or two weeks rather than stopping abruptly, or substitute a short-acting barbiturate, then gradually withdraw. *Potentially hazardous tasks:* (see above) *Additive Effects:* Meprobamate and alcohol, other CNS depressants, or psychotropic drugs may be additive; take appropriate precautions. *Pregnancy and Lactation:* Several studies indicate increased risk of congenital malformations with use of minor tranquilizers (meprobamate, chlorthalidopoxide, diazepam) during the first trimester of pregnancy. Avoid use of these drugs during this period. Consider possibility of pregnancy in a woman of childbearing potential at time of drug institution. If patient becomes pregnant during therapy with this drug, consult physician about desirability of discontinuing use of the drug. Meprobamate passes the placental barrier, is present in umbilical cord blood and breast milk of lactating mothers at concentrations two to four times that of maternal plasma; take in account in breast-feeding patients.

**Precautions:** TRIDIHETHYL CHLORIDE: Use with caution in autonomic neuropathy, hepatic or renal disease, early evidence of ileus, e.g., peritonitis, ulcerative colitis (large doses may suppress intestinal motility, thus producing a paralytic ileus; may precipitate or aggravate toxic megacolon), hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, hypertension, non-obstructing prostatic hypertrophy, hiatal hernia associated with reflux esophagitis. In the treatment of gastric ulcer may produce a delay in gastric emptying time (antral stasis). Do not rely on drug in complication of biliary tract disease. May increase heart rate in tachycardia. With overdosage, a curare-like action may occur. *Meprobamate:* To preclude oversedation, give the lowest effective dose to elderly and/or debilitated patients. Consider suicidal attempts and dispense the least amount of drug feasible at any one time. Use with caution in patients with compromised liver or kidney function to avoid excess accumulation. May precipitate seizures in epileptics.

**Adverse Reactions:** (Can occur with either component) TRIDIHETHYL CHLORIDE: (Physiologic or toxic, depending on patient response) xerostomia; urinary hesitancy and retention; tachycardia; palpitations; blurred vision; mydriasis; cycloplegia; increased ocular tension; loss of taste, headaches; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; decreased sweating; some degree of mental confusion and/or excitement especially in the elderly. MEPROBAMATE: *CNS:* Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impaired visual accommodation; euphoria, overstimulation; paradoxical excitement, fast EEG activity. *G.I.:* Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations; tachycardia, arrhythmias, transient ECG changes, syncope, hypotensive crises (one fatal case). *Allergic or Idiosyncratic:* (Usually seen during the first to fourth dose in those having no previous contact with the drug). Mild reactions are itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others include leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe (rare) include hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome, bullous dermatitis (one fatal case when given in combination with prednisolone). In case of such reactions, discontinue drug and initiate appropriate therapy (epinephrine, antihistamines, and, in severe cases, corticosteroids). Consider allergy to excipients (furnished to physicians on request). *Hematologic:* (See also Allergic or Idiosyncratic) Agranulocytosis, aplastic anemia (rarely fatal). Thrombocytopenic purpura (rare). *Other:* Exacerbation of porphyric symptoms.

All Contraindications, Warnings, Precautions, and Adverse Reactions in regard to Tridihexethyl chloride refer also to PATHILON® Tridihexethyl Chloride Lederle.

\*The FDA has evaluated PATHIBAMATE as possibly effective as adjunctive therapy in irritable bowel syndrome.

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October 1979 • The Journal of the

## Physician Consent To Settle

Several years ago, during the so-called "malpractice crisis," physicians begin taking a long, hard look at their professional liability insurance coverage and the services provided by the commercial carriers. One great concern physicians had about various insurance companies was how thoroughly each one considered the professional needs of physicians.

Many physicians were troubled by the policy of some companies to settle a claim without the consent of the involved physician. Doctors felt that in certain situations even the knowledge of a settlement could damage a physician's professional reputation. Moreover, many knowledgeable people in the medical and legal professions, as well as the insurance industry, feel strongly that one of the major causes of the "malpractice problem" today is the ill-advised settlement of claims that have no merit. By such action, the insurance industry has created an atmosphere whereby the physician and his carrier are considered an easy mark. The KMIC philosophy is that this atmosphere must be turned around and, by stressing vigorous defense whenever possible, to interject the deterrent element into the situation. Although not original with us, the adage, "Nothing in tribute, everything in defense," appropriately sums up this philosophy.

When Kentucky physicians decided to form their own insurance organization, Kentucky Medical Insurance Company, the physicians on the new company's Board of Directors agreed that company policy would be strongly supportive of doctors in every possible way. KMIC would offer many services not offered by most other companies. One of the most significant of these services is the physician consent clause . . . and we mean consent *per se*. Most professional liability insurance policies incorporate a consent clause and then qualify it in some way. With the KMIC policy, the policyholder has absolute control over whether or not a settlement will even be considered.

Each KMIC professional liability policy stipulates that in the event a claim is filed against a physician, KMIC will not settle that claim out of court unless the insured physician gives consent to that settlement. This type of commitment is typical of KMIC's total operating philosophy, one that keeps the physicians' needs uppermost in mind at all times. Now, the target physician becomes a partner with his insurance carrier and a participant in the management of the claim against him. "Master of your own destiny" is more than just a motto with us. Such a service exemplifies the benefits to Kentucky doctors of being insured by a physician-owned company.

RILEY LASSITER  
Executive Vice President  
Kentucky Medical Insurance Company



# The Maker

## Examining a Few Myths About Prescribing.

Increasing pressure is being put on the practicing physician to prescribe drugs generically. You are told that brand-name products are universally "expensive" and generic versions are relatively "cheap." To make this case, the most extreme (rather than typical) price differentials are cited. Thus, consumers are led to believe that such differentials are commonplace. Even your knowledge and your motives as a physician are questioned.

Understandably, these views have created myths. We think it's time to examine them in the light of all the facts and ramifications.



*MYTH: There are no differences in quality and performance between brand-name products and their generic counterparts. The corollary is that there are no differences among products made by high-technology, quality-conscious, research-based companies and those made by commodity-type suppliers.*

**FACT: The Food and Drug Administration does a good job in monitoring a generally excellent drug supply. Still, it has nowhere near the resources to guarantee the quality and bioavailability of all marketed products at any given time. Just a few months ago, for example, it noted that batches of tetracycline HCl capsules which met official monograph requirements were**

not bioequivalent to a reference product. As you know, there is substantial literature on this subject affecting many drugs, including such antibiotics as tetracycline and erythromycin. The record on drug recalls and court actions affirms strongly that there are differences among pharmaceutical companies and their products. Research-intensive companies have far better records than those that do no research and may practice minimum quality assurance.

---

*MYTH: Industry favors only "expensive" brand names and denigrates all generics.*

**FACT: PMA companies make 90 to 95 percent of the drug supply, including, therefore, most of the generics. Drug nomenclature is not the important point; it's the competence of the manufacturer and the integrity of the product that count.**

# Matters.

*MYTH: Generic options almost always exist.*

**FACT:** About 55 percent of prescription drug expenditure is for single-source drugs. This means, of course, that for only 45 percent of such expenditure, is a generic prescribing option available.

*MYTH: Generic prescriptions are filled with inexpensive generics, thus saving consumers large sums of money.*

**FACT:** Market data show that you invariably prescribe—and pharmacists dispense—both brand and generically labeled products from known and trusted sources, in the best interest of patients. In most cases the patient receives a proven brand product. Savings from voluntary or mandated generic prescribing are grossly exaggerated.

*MYTH: Drugs account for a major portion of the rise in health care costs.*

**FACT:** Drugs represent a very small part of such costs. The amount of the health care dollar spent for prescription drugs was about 12 cents in 1967; today it is about 8 cents. And you as a physician are most conscious of how drug therapy can cut hospitalization, avert surgery, reduce office visits and keep patients on the job.

*MYTH: Government intrusions into the marketplace will save tax money.*

**FACT:** Government schemes always cost the taxpayer something, and the costs often exceed the benefits. Certainly, any federal “help,” such as lists of wholesale drug prices sent to all physicians and pharmacists, will be no exception. Just think of the expense of keeping them current! Moreover, wholesale prices are poor guides to actual transaction prices and even worse guides to retail prices.

## The PMA Position

We believe your freedom to prescribe, either by generic or brand name, should be totally unabridged. Otherwise, your prescribing prerogatives and your relationships with patients will be seriously impaired.

## The maker does matter

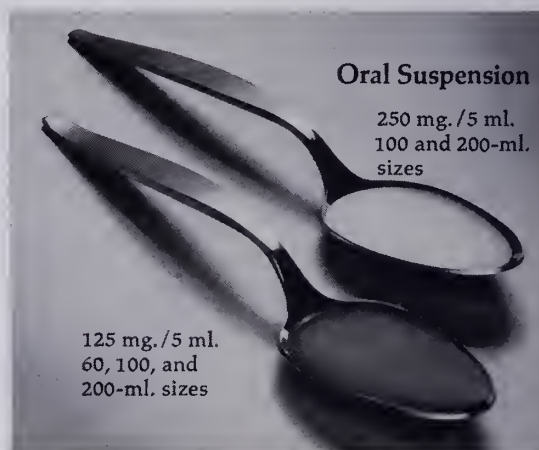
After the myths about price and equivalency have been shattered, one fact stands out more clearly than ever: *The maker does matter.* As always, your best guide to drug therapy for your patients is to select products—both brands and generics—from manufacturers with credentials and performance records you have come to respect.

# PMA

Pharmaceutical Manufacturers Association  
1155 Fifteenth Street, N.W.  
Washington, D.C. 20005



# easy to take



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## A simple solution for beating the high cost of feeding babies.

Powdered Soyolac mixed with water (according to directions on the label) is an inexpensive, soy-based infant formula your patients can buy.

Up to 50% less expensive than ready-to-serve formulas.

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Soyolac is the only leading milk-free infant formula available as an inexpensive powder. It provides the same nutritional balance as Soyolac's con-

centrated and ready-to-serve infant soy formulas — at a fraction of the cost.

Your patients who use formula will appreciate knowing about it.

For detailed information and samples, please call or write the Soyolac sales representative in your area.

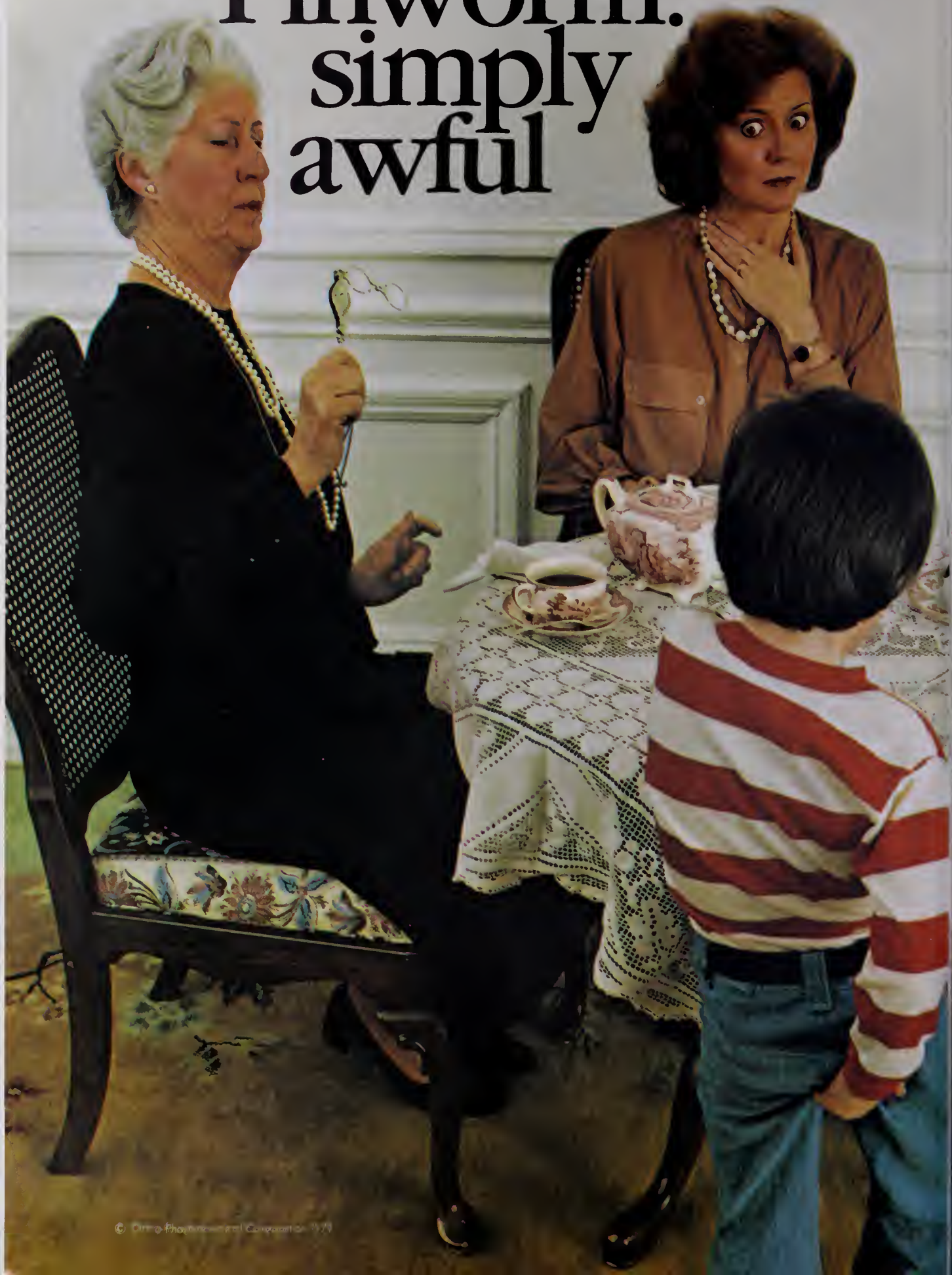
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# Pinworm: simply awful



# Vermox: awfully simple

## No dosage calculation

**one dose** single VERMOX 100 mg tablet is the treatment for pinworm in both adults and children\* of all body weights; no dosage calculations or confusion

**one time** the VERMOX tablet may be taken any time that is convenient, so that normal routines won't be interrupted; convenient schedule encourages compliance

**one tablet** chewable, orange-flavored VERMOX tablet may also be crushed and mixed or simply swallowed; no messy liquid to spill and no dye to stain

**95% cure** mean cure rate in clinical studies was 95% (range: 90%-100%) after treatment with one VERMOX tablet; in cases of reinfection, a second tablet is advised

\* Because Vermox has not been extensively studied in children under two years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnancy (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

# Vermox<sup>chewable</sup> (mebendazole)<sub>tablets</sub>

TRADEMARK

**Description** VERMOX (mebendazole) is methyl benzoylbenzimidazole-2-carbamate.

**Actions** VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes adequate for survival.

In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 µg/ml and 0.09 µg/ml, respectively.

**Indications** VERMOX is indicated for the treatment of trichuriasis (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies in function of such factors as pre-existing

diarrhea and gastrointestinal transit time, degree of infection and helminth strains.

**Contraindications** VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

**Precautions** **PREGNANCY:** VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

**PEDIATRIC USE:** The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

**Adverse reactions** Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

**Dosage and administration** The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food.

For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.

For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.

If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

**How supplied** VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.

VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.







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### Notice To Contributors

Members of the Kentucky Medical Association reading papers before other organizations are asked to submit their papers to *The Journal* for consideration by the Editors for publication. Detailed instructions to contributors appear in the Scientific Section of *The Journal* under Manuscript Information. Please forward any papers to:

Paul C. Grider, Jr., M.D., Scientific Editor  
The Journal of the Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205



## ASSOCIATIONAL NEWS



### Report on August Meeting of Board of Trustees

The Board met for the fourth time of the year on August 8-9 in Louisville. One of the main purposes of the meeting was to review reports from committees and resolutions to be submitted to the House of Delegates.

The Commissioner for Health Services, Robert Slaton, met with the Board and discussed health activities occurring at the national level, which included exemptions for HMO's under Certificate of Need, Federal funding of primary care centers, and centralized control of health planning.

Doctor Frank Gaines, Secretary of the Board of Medical Licensure, reported that the licensure examination had been recently completed which resulted in 642 new licenses. In addition, there are now 218 temporary permits and 4,512 total physicians registered in the state. A good bit of the Board's activities this year have been directed to certifying paramedics and athletic trainers which were a result of state legislation passed in 1978. The Board has also been occupied in an advisory capacity to the Board of Nursing Examiners in developing regulations.

Senior AMA Delegate, David B. Stevens, M.D., reported on the July AMA meeting. It was noted that the AMA House

considered proposed changes to the Principles of Medical Ethics, which have been referred to all state medical associations for review. These changes related to suits initiated by chiropractors who had contended that physicians were involved in restraint of trade because of a lack of any relationships with chiropractors. Doctor Stevens also commented on AMA membership and urged any activities that would increase it.

A presentation of bound *KMA Journals* for 1977-78 was made to the immediate Past President, John P. Stewart, M.D., in recognition of his service.

In the area of continuing medical education, it was noted that the AMA House of Delegates voted to withdraw participation in the Liaison Committee on Continuing Medical Education, and the AMA would now stand as the sole accrediting authority for physician CME.

Information was received on the Kentucky Medical Insurance Company. Since the beginning of operation as KMIC, the Company has sold coverage to 200 physicians. The stability of the Company is assured because of the large percentage of coverage reinsurance. It was noted that the KMIC stock holders would have their first meeting on Thursday, September 27, following the reorganizational meeting of the Board.



### Headquarters Activity

#### SEPTEMBER

- 6 Maternal and Child Health Care Committee, KMA Headquarters, Louisville
- 11 Journal Editors, Louisville
- 23-27 KMA Annual Meeting

#### OCTOBER

- 9 Journal Editors, Louisville
- 20 Physician Recruitment Fair, Ramada Inn, Louisville

#### NOVEMBER

- 13 Journal Editors, Louisville

### James L. Fine

Attorney at Law

- Professional Corporations
- Tax Planning
- Tax Returns

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Evenings and weekends — 491-5522  
310 West Liberty Street, Suite 507



## Program Announcement

**NORTON INFIRMARY/KENTUCKY ACADEMY OF FAMILY PHYSICIANS**  
**22nd ANNUAL POSTGRADUATE MEDICAL SEMINAR**  
**Norton-Children's Hospitals' Auditorium**  
**December 13, 1979**  
(Registration limited to 150)  
**Management of Ischemic Heart Disease**

|                  |  |                                      |
|------------------|--|--------------------------------------|
| 8:00- 8:40 a.m.  | Registration   |                                      |
| 8:40- 8:55 a.m.  | Opening Remarks  | James M. Riley, Jr., M.D., President |
|                  | Welcome  | Norton Medical Staff                 |
|                  |  | Wade Mountz, President               |
|                  |  | Norton-Children's Hospitals          |
| 8:55- 9:00 a.m.  | Introduction   | James E. Nutt, M.D., Moderator       |
| 9:00- 9:30 a.m.  | Clinical Recognition of Ischemic Heart Disease (IHD)         | Noble O. Fowler, M.D.                |
| 9:40-10:10 a.m.  | Nuclear Scanning in Diagnosis of IHD                         | Nancy C. Flowers, M.D.               |
| 10:20-11:00 a.m. | Medical Therapy of Angina                                    | Noble O. Fowler, M.D.                |
| 11:10-11:30 a.m. | Coffee Break   |                                      |
| 11:30-11:55 a.m. | Surgical Therapy of Angina                                   | Laman A. Gray, Jr., M.D.             |
| 12:05-12:45 p.m. | Approach to Management of Acute MI                           | Charles E. Rackley, M.D.             |
| 1:00- 2:20 p.m.  | Lunch  |                                      |
| 2:20- 2:40 p.m.  | Arrhythmias and Conduction Disturbances in Acute MI          | Nancy C. Flowers, M.D.               |
| 2:50- 3:10 p.m.  | Coffee Break   |                                      |
| 3:10- 3:40 p.m.  | Nuclear Scanning for Evaluation of Left Ventricular Function | Daniel Gralnack, M.D.                |
| 3:50- 4:20 p.m.  | Vasodilator Therapy for CHF                                  | Kanu Chatterjee, M.B., F.R.C.P.      |
| 4:30- 4:45 p.m.  | Panel Discussion   |                                      |
| 4:50 p.m.        | Adjournment  |                                      |

For registration information send:

| Name | Address | City | State | Zip |
|------|---------|------|-------|-----|
|------|---------|------|-------|-----|

To: Postgraduate Seminar Registrar, Norton Infirmary, Box 35070, Louisville, Kentucky 40232

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# Tagamet<sup>®</sup>

brand of

## cimetidine

### How Supplied:

Pale green 300 mg. tablets  
in bottles of 100 and Single Unit Packages of 100  
(intended for institutional use only).

Injection, 300 mg./2 ml.,  
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and in 8 ml. multiple-dose vials,  
both in packages of 10.

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**When painful spasm  
is the presenting  
symptom...**



...in the functional bowel/irritable bowel syndrome\*

# Bentyl®

## (dicyclomine hydrochloride USP)

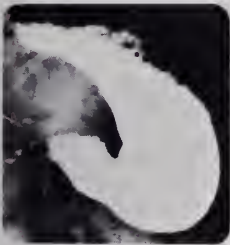
10 mg. capsules, 20 mg. tablets,  
10 mg./5 ml. syrup, 10 mg./ml. injection

helps control abnormal motor activity  
with minimal anticholinergic side effects†

### Demonstrated smooth muscle relaxant activity.

In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



Barium meal beginning to pass 10 minutes after intramuscular injection of 20 mg. Bentyl.

*"The correlation of spasm relief and drug given was excellent."*

\*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

# Merrell



# Bentyl<sup>®</sup>

(dicyclomine hydrochloride USP)

Capsules, Tablets, Syrup, Injection

AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

## INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective.

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syndrome).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloroduodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with: Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage:** Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg. *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>®</sup> (bethanechol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CONNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Ocaturo, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

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## Health and Safety Tip From the American Medical Association

### MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.
2. Drinking to handle problems or relieve symptoms.
3. Obvious preoccupation with alcohol and the frequent need to have a drink.
4. Surreptitious drinking or gulping of drinks.
5. Tendency toward making alibis and weak excuses for drinking.
6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.
7. Frequent absenteeism from the job, especially following weekends and holidays.
8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.
9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.
10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.
11. Multiple contacts with the health care system with disorders that are alcohol caused or related.
12. Persistent marital and family problems, perhaps with multiple marriages.
13. History of arrests for drunkenness or drunken driving.

*Submitted by the KMA Committee on Physicians' Health*

### CLASSIFIED

All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.

Charges for advertising are: 20¢ per word. Average word count: 7 words per line. \$5.00 minimum. Send payment with order to:

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### MEDICAL OPPORTUNITIES

**GENERAL MEDICAL INTERNISTS** for full-time faculty positions in an innovative developing program at the East Carolina University School of Medicine. Address inquiries and C.V. to Department of Medicine, East Carolina University School of Medicine, Greenville, North Carolina 27834. Affirmative Action/Equal Opportunity Employer.

**KENTUCKY EMERGENCY PHYSICIAN**—Lovely community of 10,000 in western Kentucky near Paducah needs two physicians to share evening rotations in the emergency department. 10 to 15 patients per 12-hour shift. Income excellent for this volume. For additional details, contact Tom Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982, ext. 225.

### FOR LEASE OR SALE

**MONITOR DEFIBRILLATOR.** Datascope MD-2J, Perfect condition; bought 10/6/78 for \$4,078; price—\$3,000. **HOLTER MONITOR,** compact. Used only 24 hours, purchased 8/24/78 for \$2,202, price \$2,000. Darrell E. Rains, M.D., 510 Noel Ave., Hopkinsville, Ky. 42240



# Anatomy of a Doctor.

You know what it takes to make a doctor. The motivation. The years of study and training. The dedication. The hard work.

But from the criticism leveled at doctors lately you'd think neither the public nor press had any idea.

It may surprise you, but the public does.

This was evidenced in a recent Harris Poll. In measuring public respect for U.S. leadership, it showed a drastic drop in the past five years. And "a majority of Americans is currently willing to express a 'great deal of confidence' in only one profession—medicine—on a list covering 16 types of activity." And that list included Congress and the Supreme Court.

People still look at their doctors as men to be respected and as men of integrity.

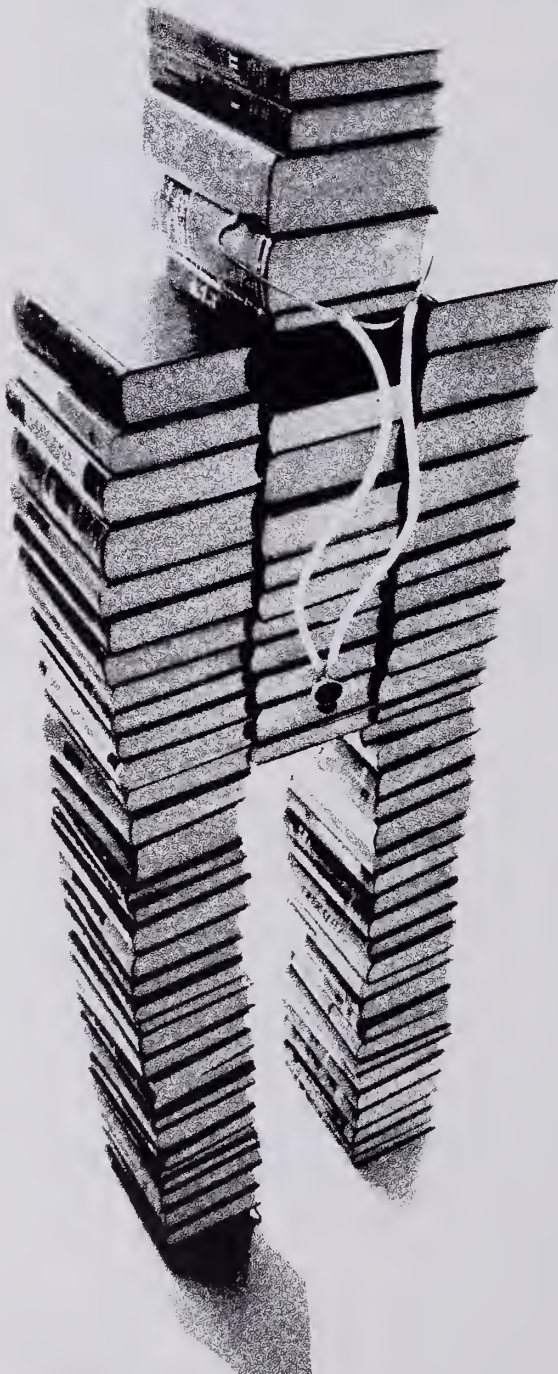
This is the true story of the American doctor. And one which the AMA is constantly telling the public as part of its communications program.

In newspapers and magazines, the AMA tells what it takes to be a doctor. American medicine's achievements. And to express the profession's concern by providing information to help every American lead a healthier life.

We can be an even more effective spokesman...with your support. Find out more about what the AMA does for you and the public. Send for a free pamphlet. Write: Dept. DW, at the address below.

**JOIN US.  
WE CAN DO MUCH MORE TOGETHER.**

American Medical Association  
535 North Dearborn Street/Chicago, Illinois 60610



**Before prescribing, please consult complete product information, a summary of which follows:**

The effectiveness of Valium (diazepam) in long-term use, that is, more than 6 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindications:** Tablets in children under 6 months of age; known hypersensitivity; acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy

**Warnings:** As with most CNS-acting drugs, caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals (drug addicts or alcoholics) under careful surveillance because of predisposition to habituation/dependence.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations, as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**ORAL:** Advise patients against simultaneous ingestion of alcohol and other CNS depressants.

Not of value in treatment of psychotic patients; should not be employed in lieu of appropriate treatment. When using oral form adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increase in dosage of standard anticonvulsant medication; abrupt withdrawal in such cases may be associated with temporary increase in frequency and/or severity of seizures.

**INJECTABLE:** To reduce the possibility of venous thrombosis, phlebitis, local irritation, swelling, and, rarely, vascular impairment when used I.V., inject slowly, taking at least one minute for each 5 mg (1 ml) given; do not use small veins, i.e., dorsum of hand or wrist, use extreme care to avoid intra-arterial administration or extravasation. Do not mix or dilute Valium with other solutions or drugs in syringe or infusion flask. If it is not feasible to administer Valium directly I.V., it may be injected slowly through the infusion tubing as close as possible to the vein insertion.

Administer with extreme care to elderly, very ill, those with limited pulmonary reserve because of possibility of apnea and/or cardiac arrest, concomitant use of barbiturates, alcohol or other CNS depressants increases depression with increased risk of apnea; have resuscitative facilities available. When used with narcotic analgesic eliminate or reduce narcotic dosage at least 1/3, administer in small increments. Should not be administered to patients in shock, coma, acute alcoholic intoxication with depression of vital signs.

Has precipitated tonic status epilepticus in patients treated for petit mal status or petit mal variant status.

Withdrawal symptoms (similar to those with barbiturates, alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal/muscle cramps, vomiting, sweating). Keep addiction-prone individuals under careful surveillance because of predisposition to habituation/dependence. Not recommended for OB use.

Efficacy/safety not established in neonates (age 30 days or less); prolonged CNS depression observed. In children, give slowly (up to 0.25 mg/kg over 3 minutes) to avoid apnea or prolonged somnolence; can be repeated after 15 to 30 minutes. If no relief after third administration, appropriate adjunctive therapy is recommended.

**Precautions:** If combined with other psychotropics or anticonvulsants, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), i.e., phenothiazines, narcotics, barbiturates, MAO inhibitors and antidepressants. Protective measures indicated in highly anxious patients with accompanying depression who may have suicidal tendencies. Observe usual precautions in impaired hepatic function; avoid accumulation in patients with compromised kidney function. Limit oral dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation (initially 2 to 2½ mg once or twice daily, increasing gradually as needed or tolerated).

**INJECTABLE:** Although promptly controlled, seizures may return; readminister if necessary, not recommended for long-term maintenance therapy. Laryngospasm/increased cough reflex are possible during peroral endoscopic procedures; use topical anesthetic, have necessary countermeasures available. Hypotension or muscular weakness possible, particularly when used with narcotics, barbiturates or alcohol. Use lower doses (2 to 5 mg) for elderly/debilitated.

**Adverse Reactions:** Side effects most commonly reported were drowsiness, fatigue, ataxia. Infrequently encountered were confusion, constipation, depression, diplopia, dysarthria, headache, hypotension, incontinence, jaundice, changes in libido, nausea, changes in salivation, skin rash, slurred speech, tremor, urinary retention, vertigo, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported, should these occur, discontinue drug.

Because of isolated reports of neutropenia and jaundice, periodic blood counts, liver function tests advisable during long-term therapy. Minor changes in EEG patterns, usually low-voltage fast activity, have been observed in patients during and after Valium (diazepam) therapy and are of no known significance.

**INJECTABLE:** Venous thrombosis/phlebitis at injection site, hypotactivity, syncope, bradycardia, cardiovascular collapse, nystagmus, urticaria, hiccups, neutropenia.

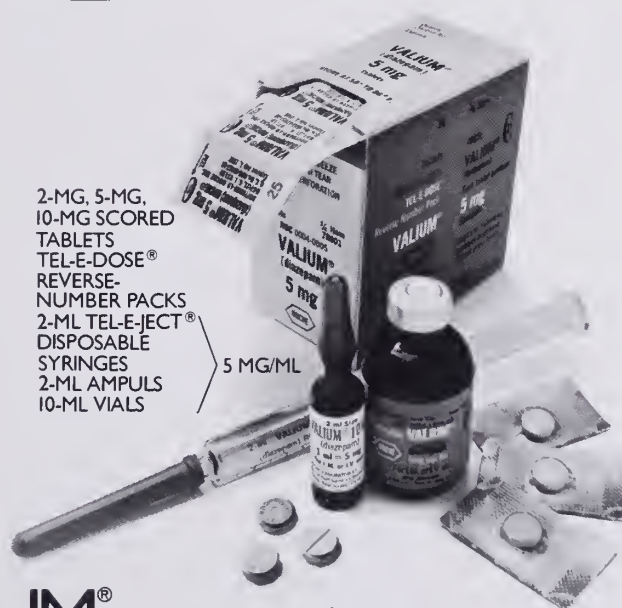
In peroral endoscopic procedures, coughing, depressed respiration, dyspnea, hyperventilation, laryngospasm/pain in throat or chest have been reported.

**Management of Overdosage:** Manifestations include somnolence, confusion, coma, diminished reflexes. Monitor respiration, pulse, blood pressure, employ general supportive measures, IV fluids, adequate airway. Use levartenerol or metaraminol for hypotension, caffeine and sodium benzoate for CNS-depressive effects. Dialysis is of limited value.

**Supplied:** Tablets, 2 mg, 5 mg and 10 mg, bottles of 100 and 500; Tel-E-Dose\* (unit dose) packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10. Prescription Paks of 50, available singly and in trays of 10. Ampuls, 2 ml, boxes of 10, Vials, 10 ml, boxes of 1, Tel-E-Ject\* (disposable syringes), 2 ml, boxes of 10. Each ml contains 5 mg diazepam, compounded with 40% propylene glycol, 10% ethyl alcohol, 5% sodium benzoate and benzoic acid as buffers, and 1.5% benzyl alcohol as preservative.




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**ONLY VALIUM® (diazepam)**  
**GIVES YOU THIS CHOICE OF DOSAGE**  
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PSYCHOTHERAPEUTIC  
SKELETAL MUSCLE  
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ONLY **VALIUM**<sup>®</sup>  
(diazepam)<sup>IV</sup>  
HAS THESE TWO  
DISTINCT EFFECTS

Please see preceding page for a summary of product information.

ROCHE

Antimicrobial Agents, Case 11:  
Subacute Bacterial Endocarditis  
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November 1979  
Volume 77  
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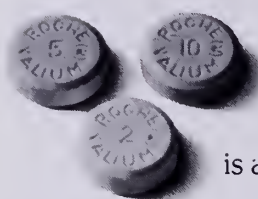
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# A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

**Valium®<sup>IV</sup>**  
**diazepam/Roche**  
2-mg, 5-mg, 10-mg scored tablets  
**a prudent choice in psychic  
tension and anxiety**

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

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## MESSAGE FROM THE PRESIDENT



**H**AVE you wondered, as I have, how other organizations and groups and, particularly, the general population, see our Association. If we are to believe what national polls indicate, physicians individually are held in higher esteem than "organized medicine." Just as the role of organized medicine has changed because of the challenges it faces, the perception of it by the public must have changed. From the image of the "kindly old country doc" to a group that has vehemently and adamantly questioned nationalized "health care for all," a certain tarnishing is inevitable in some views.

Although misinformed in detail perhaps, the public can't be denied and we probably are due for some justified criticism. We may sometimes lose sight of the fact that medicine does not exist for itself and that the new populism movement in medical care has decreed that physicians are not the sole resource of that care.

As an organization we do have a unique role and responsibility. A case in point is the issue of brain cessation and death that the House of Delegates considered. As stated during the Delegates' meeting, statutory definitions aside, what we physicians determine is the appropriate point where actual life ceases, in practice, will become the legal definition.

Another example of our inevitable role as an organization is our obligation to establish and monitor the ways that our members should conduct themselves professionally. In spite of Federal Trade Commission decrees to the contrary, the profession is singularly qualified, and responsible to address issues of intramural practices.

Organizational imperatives that are just as important, require that we influence the care of patients by other "health" personnel, in spite of our not being the sole resource of "health care." The activities of physicians' assistants, optometrists, nurse practitioners, and other groups demand our input. Unfortunately perhaps, our input must be exercised for the most part in the legislative arena, and we are sometimes seen acting as big brother or "only protecting our own turf."

But we simply must continue to pursue our views and try to effect changes where needed that we deem to be for the betterment of patient care, despite undue criticism. The hope for the future and for me particularly this year is that through effective communication we can enlist a strong ally in a well informed and responsible public.

ROBERT S. HOWELL, M.D.  
KMA President



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- 17-18 Hypertension 1979\*\*
- 20 Kentucky Regional Meeting, American College of Physi-  
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- 25 20th Annual John Walker Moore Lecture,\*\* Health  
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#### NOVEMBER

- 1 Diabetes Seminar,\*\* Stouffer's Louisville Inn
- 1-3 13th Annual Newborn Symposium,\*\* Health Sciences  
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- 7-8 Selected Topics in Nephrology and Urology,\*\*  
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- 13 Management of Ischemic Heart Disease,\*\*  
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#### FEBRUARY 1980

- 15-16 Fiberoptic Bronchoscopy: Workshop, Session II\*  
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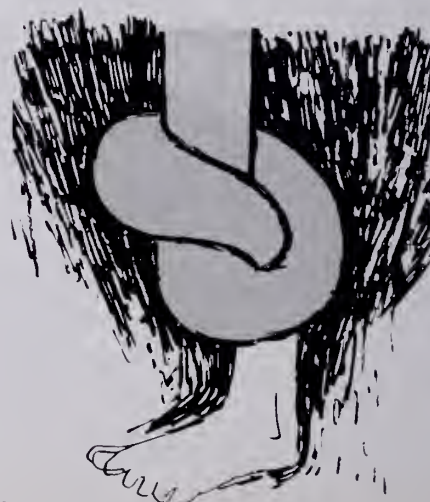
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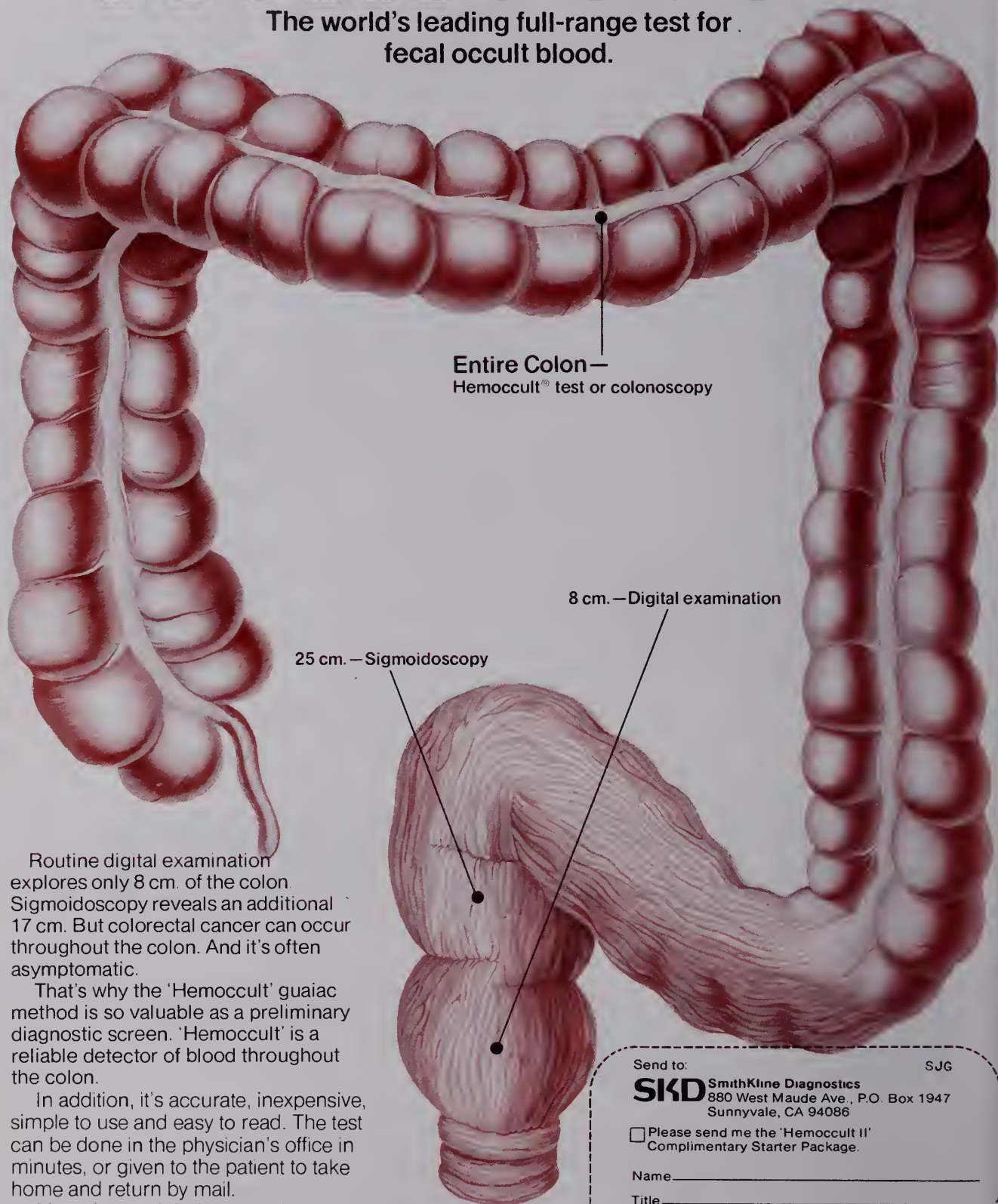
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# A Clinical Approach to the Choice of Antimicrobial Agents Case Number 11: Subacute Bacterial Endocarditis

John A. Van Arsdall, M.D., Patricia A. Barnwell, B.S., Julio C. Melo, M.D., and Martin J. Raff, M.D., Louisville, Kentucky

This is the eleventh in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choice of antimicrobial agents and explanations of why the authors choose one as the best agent.

A 27-year-old white female is admitted to hospital with a two-month history of malaise, myalgias (including back pain), arthralgias, and fever to 101.5°F. She also complains of dyspnea on exertion, which has become progressively more severe over the last several weeks. The patient had rheumatic fever at age 12 and has been taking oral phenoxymethyl penicillin (Pen Vee K®), 250 mg p.o.

each day since that time. She has never been told that she had a heart murmur. Because of dental problems, she has been visiting her dentist every three months. She "doubles" her penicillin for two days prior to and three days after any dental procedures.

Physical examination reveals an alert, well oriented, pale, anxious young woman. Blood pressure is 110/60 mm Hg, pulse 110/min., respirations 18/min., temperature 100°F, weight 154 lbs. There are conjunctival petechiae. Funduscopic examination is normal. Dentition is poor, with carious teeth and periodontitis. The lungs are clear to auscultation. Cardiac examination reveals a normal apical impulse. There is a grade II/VI mid-systolic, high-pitched, diamond-shaped murmur and a grade I/VI soft early diastolic murmur, both heard best in the left 3rd to 4th intercostal space. There is left upper quadrant tenderness without a palpable spleen. Small petechiae are seen over both pretibial areas along with small splinter hemorrhages in several nail beds. The remainder of the physical examination is normal.

Chest x-ray and ECG are normal. Hemoglobin is 10 gm/dl, hematocrit 34%, white blood cell count

*From the Section of Infectious Diseases, Department of Medicine and the Department of Microbiology and Immunology, The University of Louisville School of Medicine, P.O. Box 35260, Louisville, KY 40232.*



## BACTERIAL ENDOCARDITIS—Van Arsdall et al

11,800/mm<sup>3</sup> with a normal differential. Urinalysis shows microscopic hematuria.

At this point, each of the following would be appropriate **EXCEPT**:

- A. Draw three blood cultures each day for two days after discontinuing oral penicillin.
- B. Begin cephalothin (Keflin®), 2 g IV q 6 hours to treat for penicillin-resistant organisms.
- C. Draw blood for latex fixation for rheumatoid factor.
- D. Perform an echocardiogram.
- E. Culture pharynx and urine.

**Answer: B.** No antibiotics should be started at this time.

Several aspects of this patient's history and physical examination suggest the diagnosis of infective endocarditis involving the aortic valve. Poor dentition and dental manipulation, with a past history of rheumatic fever are major predisposing factors to the development of endocarditis. Unfortunately, these distinct historical findings are often not obtainable.<sup>1,2</sup> The long duration of her illness, with myalgias, joint pains, and fever may be key points in the history.<sup>2,3,4,5</sup> Back pain is a presenting symptom in 7 to 13% of cases of endocarditis.<sup>5,6</sup> Phenoxymethyl penicillin (Pen Vee K®) will not prevent the development of endocarditis. In this patient it is being used to prevent reinfection with group A beta-hemolytic streptococci to avoid recurrent episodes of rheumatic fever. It is **not** adequate prophylactic therapy for endocarditis during dental or other manipulative procedures.<sup>7,8,9</sup>

In any patient with a combination of unexplained fever and heart murmur, infective endocarditis must be suspected.<sup>10,11</sup> The additional finding of anemia in such a patient should prompt the primary physician to assume a diagnosis of infective endocarditis until proven otherwise. Other findings which support the diagnosis of endocarditis in the patient described include: microscopic hematuria, left upper quadrant (probably splenic) tenderness, splinter hemorrhages and petechiae, all of which are suggestive of embolic phenomena. Funduscopic examination is often of great importance but was unremarkable in this instance. It should be emphasized that these findings may not be present in all cases of infective endocarditis, and their absence does not exclude the diagnosis.

Obtaining blood cultures prior to the initiation of antimicrobial therapy is mandatory for the accurate diagnosis and proper treatment of this illness.<sup>12,13</sup> The bacteremia of endocarditis is continuous<sup>12,13</sup> and therefore most, if not all, blood cultures drawn will be

positive. Because of this, multiple positive blood cultures strongly suggest intravascular infection.<sup>13</sup> In this case, blood cultures may be negative, since the patient has been taking penicillin. Prior antibiotic therapy may inhibit bacterial growth *in vitro*, even of organisms which may be resistant to the antibiotic used.<sup>14</sup>

Despite the very strong clinical evidence for a diagnosis of endocarditis, cephalothin or other antibiotics should **not** be started until the etiologic agent of the endocarditis has been isolated, assuming the patient's cardiovascular status is stable.<sup>2</sup> The cure rate in patients with endocarditis treated without knowledge of the infecting agent is significantly lower than in those from whom the pathogen has been isolated<sup>14</sup>. Sensitivities of the organism should be quantitated and the patient's serum assayed during therapy to insure that serum levels of antibiotic are adequate to penetrate valvular vegetations and kill bacteria.

Latex fixation titers for rheumatoid factor will be positive in approximately 50% of patients who have endocarditis.<sup>2,3</sup> Echocardiography may aid in visualization of vegetations and also provide a baseline evaluation of valve competence.<sup>15,16</sup> The pharynx and urine should be cultured as possible sources of fever not due to endocarditis, and because the bacteremia which initiated the endocarditis may have originated from these sites.

Ideally, sensitivities of the organism should be determined by broth dilution, with the minimal inhibitory concentration (MIC) reported for each antimicrobial agent selected.<sup>11,13</sup> Bactericidal levels are also helpful and as noted above, these levels can be monitored in the patient's serum only if the organism is available. Once an organism is isolated, the laboratory should be requested to maintain a subculture until the illness has been terminated. Adequate therapy requires that the patient's serum be bactericidal for the organism isolated from the patient at a serum dilution of at least 1:8.<sup>11,14</sup> Virtually any hospital laboratory can develop this technique if requested to do so.

Two days after admission, the laboratory reports that three of six blood cultures are growing *Streptococcus viridans*. The organism is highly sensitive *in vitro* to penicillin, cephalothin and gentamicin. You would then begin:

- A. Clindamycin (Cleocin®), 600 mg IV q 6 hours.
- B. Chloramphenicol (Chloromycetin®), 1 g IV q 6 hours.
- C. Aqueous penicillin, 2 million units IV q 4 hours plus gentamicin (Garamycin®) 70 mg IV q 8 hours.



## BACTERIAL ENDOCARDITIS—Van Arsdall et al

D. Oral phenoxymethyl penicillin (Pen Vee K®), 500 mg p.o. qid plus streptomycin 0.5 g IM bid.

E. Cephalothin (Keflin®), 2 g IV q 6 hours.

**Answer: C.**

Clindamycin has been reported to be effective in the treatment of bacterial endocarditis.<sup>17</sup> However, clindamycin may have bacteriostatic rather than bactericidal activity against some organisms. If there is incomplete eradication of the infecting agent, relapse may occur.<sup>18</sup> Bactericidal agents (drugs that kill rather than simply inhibit growth of the organism) should be used in treating endocarditis<sup>13</sup> since leucocytes, antibodies and other serum killing factors do not penetrate into the vegetations to aid in the eradication of the causative organisms.<sup>14,19</sup> For this reason, chloramphenicol would be an inappropriate choice, since it is always bacteriostatic. Long term use of chloramphenicol may also produce dose-related bone marrow suppression of myelopoiesis and erythropoiesis. Antibiotics given orally have been reported to be effective in the treatment of endocarditis, especially in pediatric patients.<sup>20,21</sup> However, there are several inherent problems with oral agents, and we do not recommend their use. Variations in gastrointestinal absorption may result in inadequate serum bactericidal levels. Poor patient compliance may result in an inadequate course of treatment. Recent studies have shown that some streptococcal species may become "relatively resistant" to low serum concentrations of penicillin, adding to the argument against the use of oral agents.<sup>3,22</sup>

Streptomycin has been used successfully with penicillins or cephalosporins in the past, but newer aminoglycosides have fewer deleterious side effects<sup>23,24</sup> and are more effective than streptomycin *in vitro*. Streptomycin must also be given intramuscularly, with considerable discomfort to the patient.<sup>23</sup> We therefore recommend that gentamicin be administered for a minimum of one week, along with high-dose aqueous penicillin. Penicillin may then be continued alone for an additional one or two weeks when treating sensitive *Streptococcus viridans*. The renal function abnormalities and ototoxicity which may occur during therapy with gentamicin necessitate careful patient monitoring. However, these adverse effects rarely occur in less than eight days of treatment if renal function is normal.<sup>24</sup> It has been demonstrated in animal studies that aminoglycosides are synergistic with some beta-lactam antibiotics (penicillins and cephalosporins), sterilizing the blood more rapidly than penicillin alone.<sup>25</sup> Since penicillin acts only on the cell walls of dividing organ-

isms,<sup>26</sup> non-multiplying, metabolically inactive organisms may remain viable and result in reactivation of the clinical syndrome if medication is discontinued too soon. Therefore, we recommend a minimum of two weeks of therapy.

If this patient had been allergic to penicillin, the best alternative choice of therapy would be:

A. Erythromycin, 500 mg IV q 6 hours.

B. Cephalothin (Keflin®), 2 g IV q 4 hours.

C. Carbenicillin, 5 g IV q 4 hours.

D. Tetracycline, 250 mg IV q 6 hours.

E. Vancomycin (Vancocin®), 500 mg IV q 6 hours.

**Answer: B.**

Penicillin is the drug of choice in patients with penicillin-sensitive *Streptococcus viridans* endocarditis;<sup>13,14</sup> however, in patients who have had hypersensitivity reactions to penicillin, cephalothin can be used as an alternative agent, provided that one is aware of the small potential for cross-hypersensitivity between the penicillins and the cephalosporins. In patients with less serious infections, a history of penicillin allergy may preclude the use of cephalosporin, based on assessment of risks versus benefits. However, the high risk of morbidity and mortality in inadequately treated endocarditis favors cephalosporin therapy. Erythromycin and tetracycline are both bacteriostatic compounds and should not be used for the reasons mentioned above. Carbenicillin should not be used in a penicillin-allergic patient, since this compound is a penicillin derivative. Vancomycin is a good alternative antibiotic for the treatment of *Staphylococcus aureus* endocarditis or in the penicillin-allergic patient with enterococcal endocarditis. However, its use is probably unnecessary in this patient.

Bacterial endocarditis is a well established clinical syndrome with high mortality reported in the pre-antibiotic era. William Osler described detailed clinical findings in 1885.<sup>27</sup> Recent medical literature describes numerous therapeutic modalities including oral and short term courses of treatment. It should be noted that these may conflict with the recommendations presented here. We believe, however, that bacterial endocarditis is an often misdiagnosed and undertreated serious illness requiring long term combination antimicrobial therapy.

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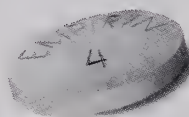
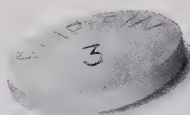
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# Update On Thyroid Storm

Paul T. Chandler, M.D. and Sharon A. Chandler, Ph.D., Cincinnati, Ohio

Thyroid storm is a potentially lethal complication of thyrotoxicosis. It usually appears upon a background of Graves' Disease, but it uncommonly will occur in association with toxic multinodular goiter. Precipitating factors occur in three categories including surgical, medical and anesthetic. A factitial etiology should be considered in patients who are lacking the stigmata of Graves' disease. Because of a potential risk of thyroid storm, saturated solutions of potassium iodide should not be administered to patients with nontoxic multinodular goiter. Emotional stress is a common precipitating factor in female patients. Hyperactivity of the autonomic nervous system is an important pathogenetic mechanism. Many laboratory values are deviated from the normal in the absence of primary endorgan involvement and return to the normal range as the thyrotoxicosis resolves. Propanolol, thiouracils, and cold iodides all have an important role in treating this problem. Selected supportive measures include use of steroids, intravenous fluids, antibiotics, diuretics, and digitalis preparations. Sedation and physical measures are useful ancillary measures. Early recognition and appropriate therapy of thyrotoxicosis remain our only prophylactic measure. The prognosis of these patients is for a survival rate of at least 90%.

**T**HYROID storm is a potentially lethal complication of thyrotoxicosis. It is marked by the precipitous onset of severe symptoms and signs of hyperthyroidism. If left untreated, most patients will expire in a period of hours to days. With early diagnosis of hyperthyroidism, appropriate therapy can prevent an attack. After the onset of thyroid storm, rapid initiation of appropriate therapy is imperative to improve the afflicted patients' chances of survival.

There are many synonyms for thyroid storm which can be encountered in reviewing the past literature. Three of the most common are thyrotoxic crisis, decompensated thyrotoxicosis and thyrotoxic storm.

Thyroid storm usually appears upon a background of Graves' Disease, but it uncommonly will occur in association with toxic multinodular goiter. Thyroid storm results in about 2% of all admissions to the hospital for hyperthyroidism.<sup>1</sup> Mortality from this disorder remains high and varies from 20% to 60% depending upon the series. Approximately 80% of the patients are women which is similar to the statistic for thyrotoxicosis without storm. Also, 80% of the cases occur between the ages of 20 and 50, and it is a rare problem before age 20 and after age 70. The duration of thyrotoxicosis preceding the onset of storm is usually between two and six months.<sup>2</sup> One study has suggested that the summer season is a more common time for the onset of this problem.<sup>3</sup> In surviving patients, the duration of severe symptoms has averaged around three days.

Diagnostic criteria for validating thyroid storm are presented in Table 1. The typical findings are hyperpyrexia, tachycardia and alterations in consciousness.

The unabated progression of dysfunction of three critical body systems will usually result in virtually total patient mortality within two days. In the cardiovascular system, early-onset tachycardia will progress to arrhythmias, congestive heart failure and pulmonary edema. These latter complications will provoke hypotension and cardiovascular collapse. These cardiovascular complications are notoriously resistant to the beneficial effect of digitalis preparations.

The sequence of central nervous system deterioration progresses from excitation to coma. Early-onset psychosis, restlessness, delirium, and mania give way to apathy, stupor, and coma. Apathetic thyrotoxic patients present a special problem in that an elderly patient may lapse into a coma without a prior period of excitation.

The gastrointestinal tract has early symptoms of anorexia, nausea, and abdominal pain which go to later ones of emesis, diarrhea, and hyperdefecation. The fluid loss from diarrheal stools may significantly contribute to dehydration.

Precipitating factors in patients with underlying thyrotoxicosis can be divided into three categories, as can

# THYROID STORM—Chandler and Chandler

be seen in Table 2. Anesthetic-related cases have been reported when ether is administered to a thyrotoxic patient. Administered ether results in a release of serum thyroxine from tissue stores into the circulation and triggers the crisis. Surgically-induced thyroid storm is brought on by liberation of serum thyroxine during manipulation of the gland. Immunological studies have revealed that thyroglobin does enter the blood stream when the thyroid gland is manipulated. Extrathyroidal surgery has also been implicated in precipitating thyroid storm. Usually surgically or anesthetic-induced thyroid storm is of sudden onset.

Among the medical precipitating events, accidental or intentional overdose of exogenous thyroid hormone has several distinguishing features. The patients do not have the stigmata of Graves' Disease, and particularly, their thyroid glands are atrophic. Caution must be made in relying exclusively on the absence of the usual features of Graves' Disease because 9% of Graves' patients can present without obvious goiter. The 24-hour radioactive iodine uptake will distinguish Graves' Disease from factitial thyrotoxicosis because it will be zero in the latter condition. Further, the 24-hour iodine uptake will usually be well above the normal range in Graves' Disease.

Another medical precipitating cause occurs with administration of radio-active iodine during diagnostic or therapeutic procedures. Thyroid storm has been most recently associated with administration of iodinated contrast material during cardiac angiopathy.<sup>4</sup> There is some rough correlation of the amount administered and the rate of induction of thyroid storm.

**TABLE 1**

1. Temperature 100 F (37.8 C)
2. Marked tachycardia
3. Exaggerated manifestations of thyrotoxicosis
4. Dysfunction of central nervous system, cardiovascular and gastrointestinal systems

**TABLE 2**

**Precipitating Events in Thyrotoxic Patients**

1. Anesthetic
  - a. Ether
2. Surgical
  - a. Direct manipulation
  - b. Extrathroidal surgery
3. Medical
  - a. Factitial overdosage
  - b. Radiation therapy
  - c. Infections and other events

A rare but noteworthy cause of iodide-induced hyperthyroidism (Jodbasedow-Syndrome) has occurred when a saturated solution of potassium iodide (SSKI) has been administered to patients with nontoxic goiters.<sup>5</sup> Simple acute illnesses, surgical procedures or traumatic events can result in thyroid storm in some unrecognized mildly thyrotoxic patients. In diabetics both ketoacidosis and insulin reactions have provoked thyroid storm in susceptible patients. Emotional stress in female hyperthyroid patients has been known to initiate thyroid storm. Although a single precipitating factor is present in most instances, multiple factors can be identified in up to one third of the patients. Medical causes now predominate over surgical and anesthetic ones as the precipitating event in thyroid storm.

Infections are the numerically most frequent initiating factor in this problem currently.<sup>8</sup> Surgically-induced storm has diminished in frequency as glands are prepared preoperatively with thiouracils as compared to "cold" iodides. The thiouracils deplete the gland of stored hormone rather than build it up as occurred in the iodide-treated glands of the pre-1970's era. It is noteworthy that withdrawal of antithyroid drugs and administration of radioactive iodide can both precipitate thyroid storm in toxic patients.

There are four main pathogenic considerations understanding the etiology of thyroid storm. Early concepts of the presence of an excessive quantity of thyroid hormone and an exhaustion of tolerance of the body to it are still relevant. Altered peripheral receptor sites and decreased serum protein binding of thyroid hormone are additional factors. An important etiologic feature is hyperactivity of the sympathetic nervous system.<sup>7</sup>

At the subcellular level the mitochondrion is the most involved organelle. Fixed cellular thyroxine results in four discernible effects on these structures. There is increased enzyme content, mitochondrial hyperplasia, increased mitochondrial activity and uncoupling of oxidative phosphorylation.<sup>8,9,10</sup>

Characteristic physical findings in thyroid storm include hyperthermia, tachycardia, widened pulse pressure, exophthalmous and goiter. The gland is usually 2-4 times the normal range whether due to toxic diffuse goiter or toxic multinodular goiter. Generalized lymphadenopathy, splenomegaly, tremors, and onycholysis (Plummer's nails) are frequent observations. Hyperthermia will be present in storm patients except for elderly ones with apathetic thyrotoxicosis.

Pertinent laboratory abnormalities have included elevated 24-hour radioactive iodine uptake, depressed



# THYROID STORM—Chandler and Chandler

cholesterol, elevated serum thyroxine and elevated measured basal metabolic rate. Nonspecific abnormalities of the complete blood count, blood glucose, electrolytes, liver profile and renal function tests are not uncommon. Hyperglycemia, anemia, leukocytosis, hyperbilirubinemia, elevated alkaline phosphatase, hypercalcemia and hypergammaglobulinemia are particularly common. These abnormalities can appear in the absence of primary end-organ involvement. With resolution of the thyrotoxicosis these abnormal values return to the normal range.

Unusual cases of triiodothyronine ( $T_3$ ) thyrotoxicosis, excessive thyrotropin (TSH) secretion and hydatidiform mole with secondary thyrotoxicosis should be considered in the differential diagnosis of a patient presenting with thyroid storm.<sup>11,12,13</sup> Appropriate laboratory investigators to exclude these entities would include a radio-immunoassay for serum triiodothyronine, serum TSH determination and urine test for pregnancy.

Pharmacotherapy for this entity has been markedly improved with the availability of propranolol.<sup>14</sup> This agent can be used in combination with cold iodides and one of the thiouracils to effectively ameliorate this disorder. Large doses of propranolol should be administered by mouth as perhaps the first pharmacotherapeutic measure. A moderate dose would be in the range of 40 milligrams by mouth every 4-6 hours during the day. Use of propranolol has largely supplanted reserpine or guanethedine as a blocker of circulating catecholamines. If oral administration isn't feasible, propranolol can be given intravenously in a dose of 0.5 to 2 mgs. every four hours. After administration of propranolol, a large dose of a thiourea drug such as 800 milligrams of propylthiouracil by mouth should be given. Propylthiouracil is considered the drug of choice in this category as it appears to prevent the peripheral conversion of circulating serum thyroxine to triiodothyronine. Triiodothyronine is known to be a more active thyroid substance than serum thyroxine. The reason for the frequent administration of these agents is that the metabolism of most drugs is accelerated in thyrotoxic states. Hoped for positive effects include decreased tachycardia, tremulousness, agitation and anxiety. One hour after propylthiouracil administration cold iodides in the form of Lugol's solution, 10 drops by mouth three times a day or a solution of sodium iodide, 500 milligrams per day by intravenous infusion should be given. These solutions will inhibit the release of thyroid hormone from the gland for about two weeks before an escape will occur (Wolff-Chaikoff effect).

Besides specific measures to block the peripheral action or prevent the release of thyroid hormone, other measures are extremely important. First, treating the precipitating factor such as infection is paramount. Second, therapy with diuretics and a digitalis preparation is indicated if the patient has developed superimposed congestive heart failure. In the face of bronchial asthma or congestive heart failure, propranolol should be avoided. Because the adrenal gland may be limited in its capacity to increase steroid output during hyperthyroidism, hydrocortisone in a dose of 200 mg. per day in divided doses should be given parenterally. Also, steroids are known to acutely lower serum triiodothyronine in patients with Graves' Disease.<sup>15</sup>

If sedatives are needed, phenobarbital via any route is a good choice because it is known to increase the hepatic turnover of serum thyroxine. Physical measures such as cooling the patient down with a hypothermic blanket or an air conditioned room are useful in febrile cases. Rehydration with intravenous fluids, giving multivitamins, and nasal oxygen administration are common adjunctive measures. Rarely, transfusions are needed if there is a low or sharply falling hematocrit. Empirically, a broad spectrum antibiotic can be given if an underlying infection is suspected. Although the presence of coma is an ominous sign, up to 90% of patients can be salvaged with the above measures. This is a vast improvement over the untreated prognosis of almost complete mortality.<sup>16</sup>

Where available, a charcoal hemoperfusion technique can be applied. During hemodialysis, blood is perfused through a charcoal filter and circulating thyroid hormones are removed. Heparin is first administered to the patient to increase circulating hormones. Unfortunately, the efficiency of this method diminishes with time of application.<sup>17</sup>

Early recognition and appropriate therapy of thyrotoxicosis remains our only prophylactic measure. Fortunately, the needed facilities and equipment to initially manage a problem such as electrocardiographic monitoring are available at most hospitals.

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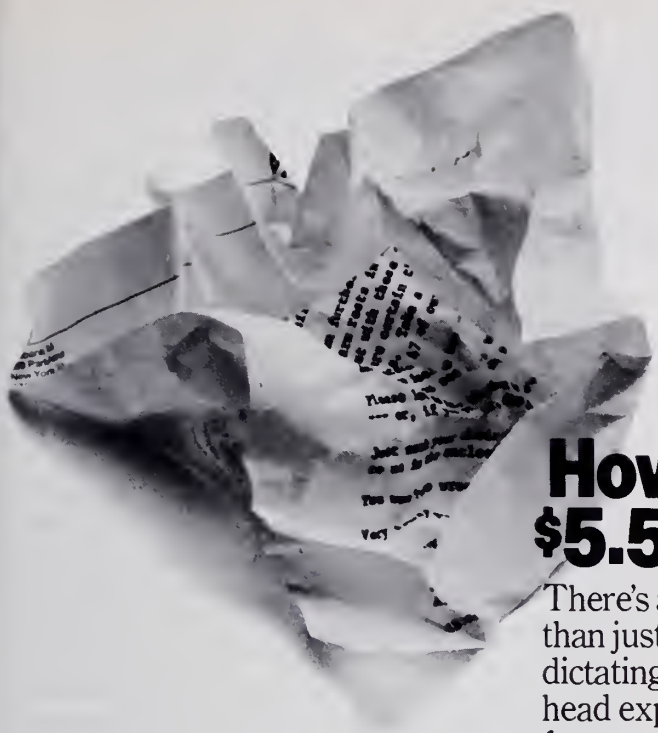
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# A Sporadic Case of Legionnaires Disease

Peter L. Powers, M.D., Lexington, Kentucky

A sporadic case of Legionnaire's disease occurred in Lexington, Kentucky and was confirmed by a 32 fold rise in titer by serologic exam after five weeks. The patient responded well to erythromycin therapy, and suffered no complications. A number of clinical and laboratory findings in this case are characteristic of Legionnaire's disease.

**A**S of November, 1978, 496 sporadic cases of Legionnaire's disease had been reported in 43 states and the District of Columbia. In addition, 558 cases had been reported as a part of outbreaks, including those in Tennessee, Vermont, and Philadelphia. There have been 19 sporadic cases reported in Kentucky, as of November, 1978. The following case is of interest to Kentucky physicians, because it is the first such case diagnosed in the Bluegrass region, and because of its classic presentation and good response to therapy.

A 60-year-old white insulation worker, presented to the emergency room with chief complaints of shortness of breath and fever. He began to feel ill five days prior to admission, when he noted onset of general malaise and aching in his legs. Four days prior to admission, he noted fever, chilling and a slight increase in his chronic, slightly productive cough. He described his sputum as thick and white in character, and had some mild increased difficulty with breathing. Two days prior to admission, he presented to his family physician who treated him with a penicillin injection and began ampicillin 500 mg. p.o. every six hours. He presented to the emergency room on the day of admission, September 13, 1978, because he felt no improvement in his condition with the medication, and he felt short of breath.

At the time of admission, he denied chest pain, or prior history of serious cardiac or pulmonary disease.

He had bouts with the flu in the past, but had never required hospitalization for these, and had never had pneumonia.

His occupational history is significant. He is an insulation installer and has been exposed to asbestos insulation for the past 20 years. Additionally, in the three days prior to the onset of his current illness, he had been doing some cutting of magnesium fittings, without a protective mask and therefore had exposure to magnesium powders and dust. He has a lifelong history of smoking a pack and a half of cigarettes daily.

He has been in excellent general health. His prior hospitalizations include those for appendectomy in 1934 at age 16, jaundice in 1941, and tonsillectomy in 1943. He has no known allergies to medications, and his only medication on admission was the ampicillin prescribed for his current illness.

Physical examination on admission revealed an acutely dyspneic, slightly cyanotic 60-year-old white male in moderately severe respiratory distress.

**Vital Signs:** B.P. 140/70, Respirations 36/minute, Pulse 92, Temp. 105° orally.

**HEENT:** Unremarkable.

**Neck:** Supple, no adenopathy or thyromegaly, no bruits or jugular venous distension.

**Lungs:** Good air entry bilaterally. A few scattered rales were heard, but no wheezes, and there was no evidence of consolidation.

**Cardiac:** No murmur, gallop or rub.

**Abdomen:** Normal bowel sounds, non tender, without organomegaly or masses.

**GU:** Benign.

**Extremities:** No clubbing or edema.

**Neurologic:** Negative, except for slight delirium.

**Skin:** Dusky colored, warm and clammy.

Initial chest x-ray in the emergency room demonstrated a left perihilar interstitial infiltrate without consolidation or mass. Initial laboratory data revealed: WBC of 9,700 with 74% segs, 15% bands, 5% lymphocytes, and 6% monos, hematocrit 41.6%, hemoglobin 14.4. Electrocardiogram: a normal sinus rhythm at 90 beats per minute with no acute ischemic changes. The patient was treated with an ice bath in the emergency room and oral aspirin, which lowered his temperature from 105° to 101° in the first 90 minutes, and he was admitted to the hospital.

*From the University of Kentucky, Department of Family Practice, Lexington, Ky.*



## LEGIONNAIRES DISEASE—Powers

The admitting diagnosis was left interstitial pneumonia, unresponsive to penicillin and ampicillin. Likely diagnostic possibilities included viral pneumonia and atypical pneumonia (*Mycoplasma pneumoniae*), and Legionnaire's disease. Consideration was also given to the possibility of an acute hypersensitivity pneumonitis secondary to his exposure to magnesium dust. Underlying malignancy was considered in view of the unusual location of the infiltrate in the left hilum. Pneumococcal pneumonia was another obvious possibility, but one would have expected a response to the penicillin. Staphylococcal pneumonia is rare in previously healthy persons with prior influenzal virus infection, so was unlikely here. Aspiration pneumonitis is ruled out with no supportive history of seizure, loss of consciousness, or alcoholism.

Laboratory data included admission WBC of 9,700, hematocrit 41.6%, and hemoglobin 14.4. At discharge, the WBC was 6,300 with 38 segs, 28 bands, 26 lymphs, 6 monos and 2 eos. The hematocrit was 37.2% and the hemoglobin was 13.0. Urinalysis was unremarkable except for a specific gravity of 1.032 and albumin of 30 mg/dl. Quantitative urine protein was elevated at 815 mg per 24 hours in 1810 ml total volume (Normal 0-150 mg). SMA-12 revealed: Calcium 7.9, Inorganic Phosphorus 2.3, Glucose 133, BUN 20, Uric acid 5.6, Cholesterol 150, Total protein 6.3, Albumin 3.2, Total Bilirubin .6, Alkaline phosphatase 65, LDH 242, and SGOT 50. Repeat SMA-12 was essentially the same, but glucose was 101, LDH was 290 and SGOT 53, Sodium 132, Potassium 4.3, Chloride 99, and CO<sub>2</sub> 25. Three blood cultures revealed no growth, and the sputum culture showed usual throat flora. Acid fast stains of the sputum were negative on three occasions. The P.P.D. skin test was negative at 24 and 48 hours. Cold agglutinins were 1:128. Acute viral titers were drawn on admission on September 13, 1978. Convalescent titers were drawn two weeks after discharge on September 29, 1978, and demonstrated no rise in titer to Group A or Group B influenza, to adenovirus or to *Mycoplasma pneumoniae*.

Upon admission the patient was treated with D5 1/4 normal saline and 20 meg KCL per liter intravenously at a rate of 150 cc's per hour. After cultures of his sputum and blood were obtained, he was begun on erythromycin 500 mg orally, four times per day. During the first 24 hours of hospitalization, he had progressively less difficulty with shortness of breath. He experienced some increase in sputum production with rehydration. He became afebrile after 48 hours, and was discharged on the morning of the fourth hos-

pital day, to continue on erythromycin, 250 mg. Q.I.D. for an additional seven days.

Acute and convalescent Legionnaire's titers were drawn from this patient and provide the basis for diagnosis. The first specimen, drawn on September 13, 1978, revealed a titer of less than 1:32. The second specimen, drawn two weeks after hospital discharge on September 29, 1978, revealed a titer of 1:64, which is only a two-fold rise, and is only suggestive, but not diagnostic for Legionnaire's Disease. The third and final specimen was drawn on October 13, 1978, a full five weeks after the onset of illness on September 8, and the titer was 1:1024.

A four-fold rise in titer is considered to indicate recent infection. The laboratory tool to use in the confirmation of suspected Legionnaire's disease is the Indirect Fluorescent Antibody Test, using acute and convalescent sera. Because only one-half of Legionnaire's patients will show the necessary four-fold rise in titer within the first two weeks of illness, at least one specimen should be collected 21-64 days after the onset of illness, as was done in this case.

A number of clinical and laboratory findings in this case are suggestive of Legionnaire's disease and merit punctuation. As is typical, the earliest symptoms were malaise and muscle aches. Within a day, there was rapidly rising fever and chills. Cough was also present early, and was only slightly productive. This patient's physical exam was largely unremarkable when he was first seen, except for shortness of breath and fever to 105°. A few rales were heard, but there was no evidence of consolidation, and the chest x-ray revealed an interstitial-type pneumonitis.

Typical laboratory findings often include: leukocytosis, 3+ proteinuria or greater, erythrocyte sedimentation rate greater than 80 per hour, and in a significant minority of patients, hyponatremia, mild azotemia, elevation of SGOT and alkaline phosphatase. Nearly all of these findings were present in this case: Inorganic phosphorus was low at 2.3, mild azotemia with BUN 21, mild SCOT elevation to 53, mild hyponatremia with sodium of 132, and proteinuria. Cold agglutinins titer was elevated, as is often seen, even though there was no subsequent rise in titer to *Mycoplasma*.

As with other cases of Legionnaire's disease, this patient's cough became more productive during the course of the illness, but was not purulent. The chest x-ray showed considerable increase in interstitial infiltrate after several days, even though the patient was improving clinically.

## LEGIONNAIRES DISEASE—Powers

There are several serious complications described in other cases of Legionnaire's disease that were not manifested here. Upper and lower gastrointestinal bleeding is often seen, but was not evident here. Shock occurred in 50% of the 29 patients who died in the Philadelphia outbreak in July, 1976, and another four patients of the 182 Philadelphia cases developed renal failure requiring dialysis.<sup>1</sup> Mechanical ventilation was required in 20% of those patients hospitalized.

Erythromycin was used from the outset in this case and seems to be the most beneficial antibiotic for Legionnaire's disease. In the study of 24 cases published by Kirby, et.al., 15 of the 19 patients who survived were given erythromycin.<sup>2</sup> Most of the patients who were treated with antibiotics other than erythromycin had progression of the disease. The selection of erythromycin is also supported by information from the Philadelphia outbreak of 1976, which demonstrated decreased case-to-fatality ratio in patients treated with erythromycin or tetracycline. Guinea pig studies also provide evidence in support of erythromycin. Fraser, et.al., demonstrated that ill animals treated with erythromycin survived, whereas control animals died with Legionnaire's disease.<sup>3</sup> The recommendation at present is to continue erythromycin treatment for at least three weeks.

Legionnaire's disease is caused by a gram negative, non acid fast bacterium. This bacillus was isolated

from lung tissue of four of the fatal cases from the Philadelphia outbreak, and subsequent serologic testing of the survivors by indirect fluorescent antibody tests confirmed its etiologic role.<sup>4</sup> Thus far, the bacillus has only been isolated from lung biopsy, pleural fluid or post mortem specimens of affected patients. A four-fold rise in antibody titer, however, is considered diagnostic, or a titer of 1:128 or greater in patients who do not demonstrate a rise.

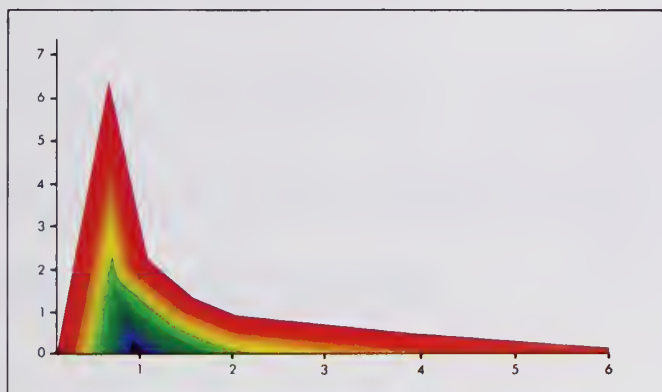
Legionnaire's disease is a potentially fatal illness. The mode of spread appears to be airborne, and not person to person. As more and more sporadic cases appear, we must consider Legionnaire's disease in the differential diagnosis, whenever the clinical picture suggests severe viral pneumonia, as early recognition and treatment has proven to be beneficial.

**References** 1. Fraser DW, Tsai TR, et al: Legionnaire's Disease: Description of an Epidemic of Pneumonia. *New Eng J Med*, 297: 1198-1197, 1977. 2. Kirby BD, Snyder KM, et al: Legionnaire's Disease: Clinical Features of 24 Cases. *Annals of Int Med*, 89:297-309, 1978. 3. Fraser DW, Bopp C, Wachsmuth IK, et al: Antibiotic Treatment of Guinea Pigs Infected with Agent of Legionnaire's Disease. *Lancet* 1:175-177, 1978. 4. McCade JE, Shepard CC, et al: Legionnaire's Disease: Isolation of a Bacterium and Demonstration of its Role in Other Respiratory Disease. *New Eng J Med* 297:1197-1208, 1977. 5. Scully RE, Galdabini JJ, McNeeley BU: Legionnaire's Disease, Presentation of Case, Massachusetts General Hospital. *New Eng J Med* 299:347-354, 1978. 6. Laboratory Support for the Diagnosis of Legionnaire's Disease. *Epidemiologic Notes & Reports*, 13:2, 1978. 7. Legionnaire's Disease. *Epidemiologic Notes & Reports*, 12:10, October, 1977.

Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA office: 502-459-9790.



more  
than just spectrum

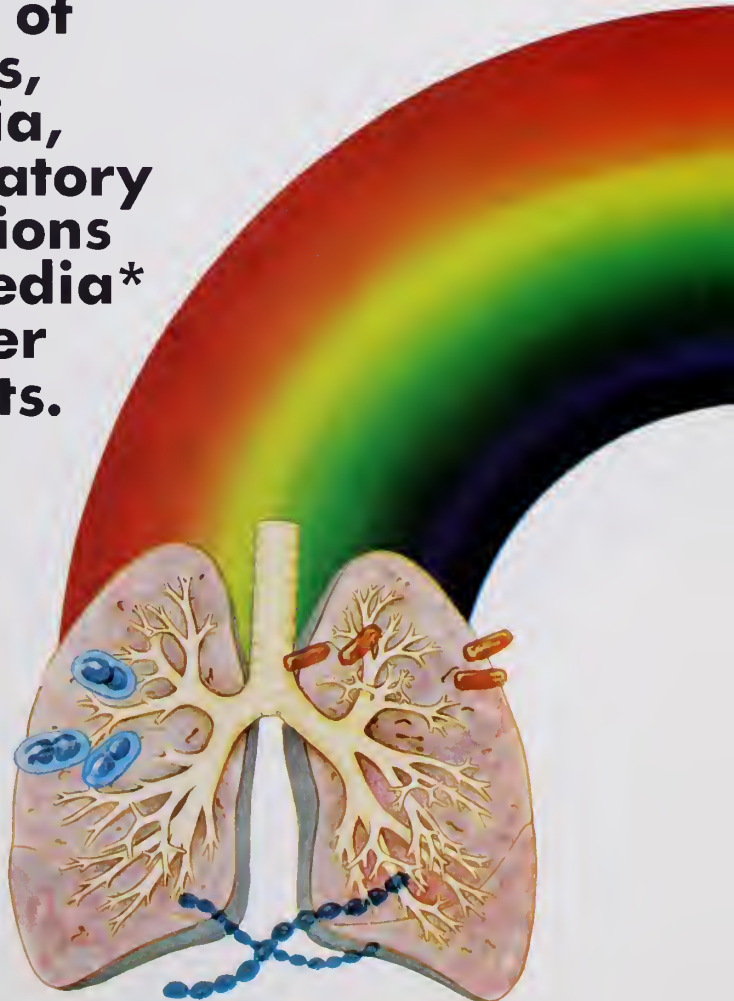


New **CYCLAPEN**®  
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Suspension

**Efficacy  
proven in the  
treatment of  
bronchitis,  
pneumonia,  
upper respiratory  
tract infections  
and otitis media\*  
with fewer  
side effects.**



\*Due to susceptible organisms  
(See important information on last page.)



# New CYCLAPEN<sup>®</sup>

(cyclacillin) Tablets/  
Suspension

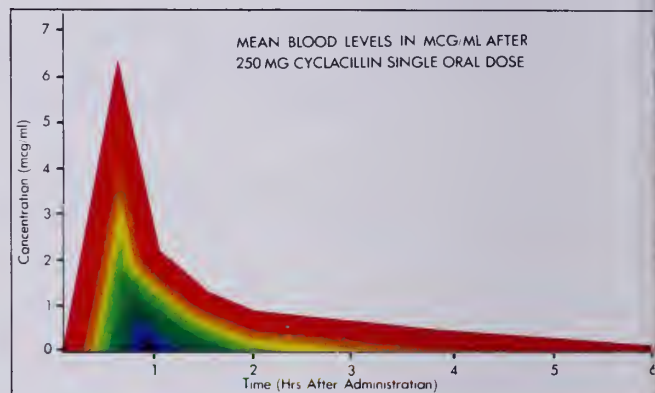
**efficacy with fewer side effects than ampicillin confirmed in studies of 2,580 patients**

Rapid, virtually complete absorption from GI tract

Rapid onset of action—mean peak serum levels within 30 minutes

Exceptionally high peak blood levels—3 times greater than ampicillin (clinical efficacy may not always correlate with blood levels)

Rapidly excreted unchanged in the urine—1½ times faster than ampicillin



| High cure rate with CYCLAPEN <sup>®</sup>   |   |                 |
|---|---|-----------------|
| Causative Organism  | Bronchitis/Pneumonia <sup>†</sup>   | No. of Patients |
| <i>S. pneumoniae</i>  | 100   | 73              |
|   | 95  |                 |
| Chronic Bronchitis <sup>†</sup> (acute exacerbation)                                      |   |                 |
| <i>H. influenzae</i>  | 92  | 12              |
|   | Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to <i>H. influenzae</i> |                 |
| Streptococcal Sore Throat <sup>†</sup>  |   |                 |
| Group A beta-hemolytic Streptococcus  | 100   | 44              |
|   | 86  |                 |
| <div><div></div> % Clinical Response</div> <div><div></div> % Bacterial Eradication</div> |   |                 |

**more than just spectrum in bronchitis, pneumonia and upper respiratory tract infections<sup>†</sup>**

\*Includes all patients treated. 2,415 evaluated for safety; 1,819 evaluated for efficacy.

<sup>†</sup>Due to susceptible organisms.

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# effects than double-blind patients\*

fewer side effects with CYCLAPEN® in  
double-blind studies to date<sup>1,2</sup>

| Total number of drug-related side effects in all patients |                                |
|---|--------------------------------|
| CYCLAPEN®   | 128 of 1,286 (10%) of patients |
| ampicillin  | 202 of 1,129 (18%) of patients |
| Difference statistically significant ( $P < 0.001$ )      |                                |

CYCLAPEN® (cyclacillin)  
effective for bronchitis, pneumonia,  
and upper respiratory tract infections†

Excellent clinical results in bronchitis,  
pneumonia and upper respiratory tract  
infections

Significantly lower incidence of diarrhea  
and skin rash

Gald JA, Hegarty CP, Deitch MW, Walker BR:  
Double-blind clinical trials of oral cyclacillin  
and ampicillin, *Antimicrob Ag Chemother*  
15:55-58, (Jan.) 1979.

Data on file, Wyeth Laboratories.

Wyeth Laboratories  
Philadelphia, Pa 19101



## more than just spectrum in otitis media

Clinical efficacy of CYCLAPEN® in otitis media†

| Causative Organism  |    | No. of Patients |
|---|----|-----------------|
| <i>S. pneumoniae</i>  | 96 | 82              |
|   | 95 |                 |
| <i>H. influenzae</i>  | 88 | 96              |
|   | 85 |                 |
| <div><div></div> % Clinical Response</div> <div><div></div> % Bacterial Eradication</div> |    |                 |

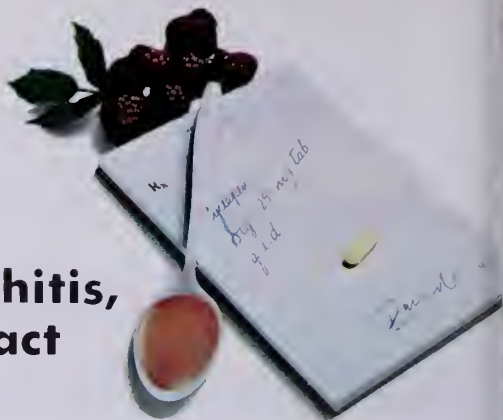
# more than just spectrum CYCLAPEN® (cyclacillin) Tablets/ Suspension

New from Wyeth Laboratories

# CYCLAPEN<sup>®</sup>

(cyclacillin) Tablets/  
Suspension

more than just spectrum in bronchitis,  
pneumonia, upper respiratory tract  
infections and otitis media\*



- Rapid, virtually complete absorption from GI tract
- Rapid onset of action—mean peak serum levels within 30 minutes
- Exceptionally high peak blood levels—3 times greater than ampicillin (clinical efficacy may not always correlate with blood levels)
- Rapidly excreted unchanged in the urine—1½ times faster than ampicillin
- Significantly fewer episodes of diarrhea and skin rash than reported with ampicillin in studies to date
- Excellent clinical response and outstanding bacterial eradication documented in double-blind studies involving 2,581 patients
- New CYCLAPEN<sup>®</sup> Suspension—great-tasting raspberry punch flavor

**How Supplied**  
CYCLAPEN<sup>®</sup> (cyclacillin)  
tablets:  
250 mg scored tablets  
500 mg scored tablets

#### Indications

Cyclapen<sup>®</sup> (cyclacillin) has less *in vitro* activity than other drugs in the ampicillin class of antibiotics and its use should be confined to the indications listed below.

Cyclapen<sup>®</sup> is indicated for the treatment of the following infections:

#### RESPIRATORY TRACT

Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci (formerly *D pneumoniae*)

Otitis Media caused by *S. pneumoniae* (formerly *D pneumoniae*) and *H. influenzae*

Acute exacerbation of chronic bronchitis caused by *H. influenzae*\*

\*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

**SKIN AND SKIN STRUCTURES** (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers

**URINARY TRACT INFECTIONS** caused by *E. coli* and *P. mirabilis* (This drug should not be used in any infections caused by *E. coli* and *P. mirabilis* other than urinary tract infections.)

**NOTE:** Cultures and susceptibility tests should be performed initially and during treatment to monitor the effectiveness of therapy and the susceptibility of bacteria. Therapy may be instituted prior to the results of sensitivity testing.

#### Contraindications

The use of this drug is contraindicated in individuals with a history of an allergic reaction to penicillins.

#### Warnings

CYCLACILLIN SHOULD ONLY BE PRESCRIBED FOR THE INDICATIONS LISTED IN THIS INSERT.

CYCLACILLIN HAS LESS *IN VITRO* ACTIVITY THAN OTHER DRUGS OF THE AMPICILLIN CLASS. ANTIBIOTICS. HOWEVER, CLINICAL TRIALS HAVE DEMONSTRATED THAT IT IS EFFICACIOUS FOR THE RECOMMENDED INDICATIONS. SERIOUS AND OCCASIONAL FATAL HYPERSENSITIVITY (ANAPHYLACTOID) REACTIONS HAVE BEEN REPORTED IN PATIENTS RECEIVING PENICILLIN.

ALTHOUGH ANAPHYLAXIS IS MORE FREQUENT FOLLOWING PARENTERAL ADMINISTRATION, IT HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. THESE REACTIONS ARE MORE APT TO OCCUR IN INDIVIDUALS WITH A HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. THERE ARE REPORTS OF PATIENTS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY REACTIONS WHO EXPERIENCED SEVERE HYPERSENSITIVITY REACTIONS WHEN TREATED WITH A CEPHALOSPORIN. BEFORE THERAPY WITH A PENICILLIN, CAREFUL INQUIRY SHOULD BE MADE ABOUT PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, AND OTHER ALLERGENS. IF AN ALLERGIC REACTION OCCURS, THE DRUG SHOULD BE DISCONTINUED AND APPROPRIATE THERAPY SHOULD BE INITIATED. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE, OXYGEN, INTRAVENOUS STEROIDS, AIRWAY MANAGEMENT, INCLUDING INTUBATION, SHOULD ALSO BE ADMINISTERED AS INDICATED.

#### Precautions

Prolonged use of antibiotics may promote the overgrowth of nonsusceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken.

**PREGNANCY:** Category B. Reproduction studies have been performed in mice and rats at doses up to ten times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**NURSING MOTHERS:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when cyclacillin is administered to a nursing woman.

#### Adverse Reactions

The oral administration of cyclacillin is generally well tolerated.

As with other penicillins, untoward reactions of the sensitivity phenomena are likely to occur, particularly in individuals who have previously demonstrated

CYCLAPEN<sup>®</sup> (cyclacillin) for  
oral suspension  
125 mg per 5 ml:  
100 ml and 200 ml bottles  
250 mg per 5 ml:  
100 ml and 200 ml bottles

hypersensitivity to penicillins or in those with a history of allergy, asthma, fever, or urticaria.

The following adverse reactions have been reported with the use of cyclacillin (in approximately 1 out of 20 patients treated): nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 50). Instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS.)

Other less frequent adverse reactions which may occur and that have been reported during therapy with other penicillins are: anemia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. Reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

#### Dosage and Administration

|  | ADULTS                                | CHILDREN   |
|--|---------------------------------------|--|
|  |                                       |  |
| Respiratory Tract Infections & Pharyngitis** | 250 mg q.i.d. in equally spaced doses | Dosage should not be in a dose higher than for adults.<br>body weight <20 lbs: 125 mg q.i.d. in equally spaced doses<br>body weight >20 lbs: 250 mg q.i.d. in equally spaced doses |

|                          |                             |   |  |
|--------------------------|-----------------------------|---|--|
| Bronchitis and Pneumonia | Mild or Moderate Infections | 250 mg q.i.d. in equally spaced doses                                 | 50 mg/kg/day q.i.d. in equally spaced doses                          |
|                          | Chronic Infections          | 500 mg q.i.d. in equally spaced doses                                 | 100 mg/kg/day q.i.d. in equally spaced doses                         |
| Otitis Media             |                             | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity | 50 to 100 mg/kg q.i.d. in equally spaced doses depending on severity |
| Skin & Skin Structures   |                             | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity | 50 to 100 mg/kg q.i.d. in equally spaced doses depending on severity |
| Urinary Tract            |                             | 500 mg q.i.d. in equally spaced doses                                 | 100 mg/kg/day in spaced doses  |

\*As with antibiotic therapy generally, treatment should be continued a minimum of 48 to 72 hours after the patient becomes asymptomatic. Evidence of bacterial eradication has been obtained.

\*\*In infections caused by Group A beta-hemolytic streptococci, a minimum of 10 days of treatment is recommended to guard against the risk of the fever or glomerulonephritis.

In the treatment of chronic urinary tract infection, frequent bacteriologic clinical appraisal is necessary during therapy and may be required for months afterwards.

Persistent infection may require treatment for several weeks. Cyclacillin is not indicated in children under 2 months of age.

#### Patients with Renal Failure

Based on a dosage of 500 mg q.i.d., the following adjustment in interval is recommended:

Patients with a creatinine clearance of >50 ml/min need no interval adjustment.

Patients with a creatinine clearance of 30-50 ml/min should receive doses every 12 hours.

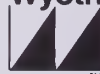
Patients with a creatinine clearance of between 15-30 ml/min receive full doses every 18 hours.

Patients with a creatinine clearance of between 10-15 ml/min receive full doses every 24 hours.

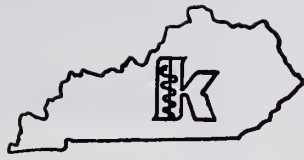
In patients with a creatinine clearance of 10 ml/min serum creatinine values of 10 mg%, serum cyclacillin levels are recommended to determine both subsequent dosage and frequency.

\*Due to susceptible organisms.

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## GRAND ROUNDS



University of Kentucky Department of Surgery

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

### Claudication In A Teenager Due To Potential Artery Entrapment Syndrome

#### History

This 15-year-old white male presented to the emergency room of the University of Kentucky Medical Center with severe pain in his right foot and toe. He had a two-month history of having had a number of similar episodes of pain and numbness. The physical examination was normal except for an ischemic great toe and absent pedal pulses on the right. The non-palpable posterior tibial pulse at the ankle was found to be 66mm Hg with the doppler while no flow signal could be found in the anterior tibial artery.

Formal post admission evaluation revealed normal laboratory studies including tests for collagen vascular disease, cryoglobulins, and lipids. A more detailed history was noncontributory except for the fact that the patient's foot symptoms were clearly related to activity.

An arteriogram revealed a normal aorto-iliac femoral system bilaterally. There was a segmental eccentric filling defect noted on the mid-popliteal artery on the symptomatic extremity. The posterior tibial, peroneal, and anterior tibial arteries all showed segmental occlusion with reconstitution (Fig. 1). An extensive cardiac evaluation and consultants failed to make a diagnosis and the patient was discharged without specific therapy.

The following month the patient was seen in the surgical outpatient department and showed substantial clinical improvement. Pedal pressures were equal bilaterally. The clinical improvement was only transitory and the patient was rearteriogrammed the following month (Fig. 2). The popliteal artery was completely thrombosed.



FIG. 1: There is an eccentric filling defect in the midpopliteal artery and segmental occlusion below the popliteal bifurcation.

The patient had bilateral popliteal exploration in February, 1979. The thrombosed right popliteal artery was displaced by the medial head of the gastrocnemius muscle. A fibrotic periadventitial reaction corresponded to the site of muscular trauma and compression. The popliteal vein was in a normal anatomic location.

The thrombosed popliteal artery and the anomalous muscular attachment were resected. Arterial continuity was re-established by an interposition saphenous vein



graft. An arteriogram demonstrated a well-placed functioning vein graft and residual segmental occlusion in the distal arterial tree (Fig. 3).

Exploration of the asymptomatic left popliteal artery revealed a small anomalous muscular insertion and a normal popliteal artery. The popliteal vein, however, appeared to be encircled by the medial head of the gastrocnemius.

The pathology of the resected thrombosed artery showed no significant arteriosclerosis. The lumen was occluded by an organizing thrombus. There was fragmentation of the internal elastic lamina and focal occlusion of the vasa vasorum. The adventitia showed extensive scarring.

Followup examination four months postoperatively revealed equal pedal pressures bilaterally. The patient was asymptomatic even with vigorous activity.

**Discussion**

The presenting symptoms in this teenager were a painful ischemic great toe and claudication. The impending tissue loss and near normal pressure in the posterior tibial artery in the involved foot suggested an embolic event to the forefoot. The initial arteriogram was performed looking for a proximal arterial source of the emboli. The aorta, iliac, and femoral arteries were normal bilaterally. The significance of the popliteal artery narrowing was not appreciated initially.

Progression of the symptoms combined with loss of pedal and popliteal pulses led to the rearteriogram and diagnosis.



FIG. 3: Postop arteriogram with functioning interposition vein graft.

The popliteal artery entrapment syndrome has been recognized for only a little more than a decade. Its most characteristic feature is unilateral claudication in the foot and calf in a teenager or young adult.

This symptom complex is due to a developmental defect in which the medial head of the gastrocnemius distorts and/or compresses the popliteal artery. Repetitive muscular contraction and trauma leads to claudication and popliteal thrombosis.<sup>1</sup>

The onset of symptoms may be associated with vigorous muscular activity while running and can be easily confused as muscular cramps or fatigue. Initial examination may be completely normal. Pedal pulses may be easily palpable and the patient completely asymptomatic. Diagnosis at this time requires some means of reproducing the symptoms or demonstrating a popliteal pressure gradient. The muscular constriction of the popliteal artery may be accentuated by passive dorsiflexion of the foot or active plantar flexion against resistance. Pulse recordings during these maneuvers may be confirmatory. Treatment at this stage requires simple detachment of the anomalous muscular contraction to allow the popliteal to assume a more normal anatomical position.

Repetitive muscular constriction and trauma will eventually lead to thrombosis with or without post stenotic aneurysmal change. Treatment at this stage of the disease requires bypass grafting and division of any muscular constriction.



FIG. 2: Segmental occlusion of popliteal artery with reconstitution.

Early diagnosis is possible only when there is both appreciation of this entity and a high index of suspicion. Unilateral claudication in the teenager and young adult is such an unusual symptom that it is easily confused with nonspecific musculoskeletal symptoms. Another entity that produces claudication in teenagers is periadventitial cystic obstruction of the popliteal artery. This disease is of unknown cause. It is easily treated by removal of the cystic compression or bypass grafting.

### Summary

Unilateral claudication and ischemic symptoms in a teenager were caused by thrombosis of the popliteal artery with distal embolization. Popliteal artery obstruction in young adults is likely due to an anomalous muscular insertion and repetitive muscular contraction. The differential diagnosis is that of cystic involvement of the popliteal artery.

When the diagnosis is made at an early stage of this disease, simple division of the anomalous muscle bundle is curative. As the disease progresses, popliteal artery thrombosis occurs requiring bypass grafting.

**References** 1. Gibson MHL, Mills JG, Johnson GE, Downs AR: Popliteal Entrapment Syndrome. *Ann Surg* 185:341-348, 1977.

CHARLES R. SACHATELLO, M.D.

### Brief Summary of Prescribing Information

**Indications and Usage:** Symptomatic relief of anxiety, tension, agitation, irritability and insomnia associated with anxiety neuroses and transient situational disturbances; anxiety associated with depressive symptoms and as a treatment of symptoms of anxiety if such symptoms are a significant feature of functional or organic disorders, particularly gastrointestinal or cardiovascular.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

**Warnings:** Not recommended in primary depressive disorders or psychoses. As with all CNS acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, and to diminished tolerance for alcohol and other CNS depressants.

**Physical and Psychological Dependence:** Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addictive-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid over sedation.

Terminate dosage gradually since abrupt withdrawal of any anti-anxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions.

Observe usual precautions with impaired renal or hepatic function.

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular components.

Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (approximately 6 times the maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatric patients requires caution and frequent monitoring for symptoms of upper GI disease.

Safety and effectiveness in children under 12 years have not been established.

**ESSENTIAL LABORATORY TESTS:** Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

**CLINICALLY SIGNIFICANT DRUG INTERACTIONS:** Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

**CARCINOGENESIS AND MUTAGENESIS:** No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

**PREGNANCY:** Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chloridiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug.

In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

**NURSING MOTHERS:** It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring of vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levaterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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**Precautions:** TRIDIHETHYL CHLORIDE: Use with caution in autonomic neuropathy, hepatic or renal disease, early evidence of ileus, e.g., peritonitis, ulcerative colitis (large doses may suppress intestinal motility, thus producing a paralytic ileus); may precipitate or aggravate toxic megacolon), hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, hypertension, non-obstructing prostatic hypertrophy, hiatal hernia associated with reflux esophagitis. In the treatment of gastric ulcer may produce a delay in gastric emptying time (antral stasis). Do not rely on drug in complication of biliary tract disease. May increase heart rate in tachycardia. With overdosage, a curare-like action may occur. *Meprobamate:* To preclude oversedation, give the lowest effective dose to elderly and/or debilitated patients. Consider suicidal attempts and dispense the least amount of drug feasible at any one time. Use with caution in patients with compromised liver or kidney function to avoid excess accumulation. May precipitate seizures in epileptics.

**Adverse Reactions:** (Can occur with either component) TRIDIHETHYL CHLORIDE: (Physiologic or toxic, depending on patient response) xerostomia; urinary hesitancy and retention; tachycardia; palpitations; blurred vision; mydriasis; cycloplegia; increased ocular tension; loss of taste, headaches; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; decreased sweating; some degree of mental confusion and/or excitement especially in the elderly. MEPROBAMATE: CNS: Drowsiness, ataxia, dizziness, slurred speech, headache, vertigo, weakness, paresthesias, impaired visual accommodation; euphoria, overstimulation; paradoxical excitement, fast EEG activity. G.I.: Nausea, vomiting, diarrhea. *Cardiovascular:* Palpitations; tachycardia, arrhythmias, transient ECG changes, syncope, hypotensive crises (one fatal case). *Allergic or Idiosyncratic:* (Usually seen during the first to fourth dose in those having no previous contact with the drug). Mild reactions are itchy, urticarial, or erythematous maculopapular rash (generalized or confined to groin). Others include leukopenia, acute nonthrombocytopenic purpura, petechiae, ecchymoses, eosinophilia, peripheral edema, adenopathy fever, fixed drug eruption with cross reaction to carisoprodol, and cross sensitivity between meprobamate/mebutamate and meprobamate/carbromal. More severe (rare) include hyperpyrexia, chills, angioneurotic edema, bronchospasm, oliguria, anuria, anaphylaxis, erythema multiforme, exfoliative dermatitis, stomatitis, proctitis, Stevens-Johnson syndrome, bullous dermatitis (one fatal case when given in combination with prednisolone). In case of such reactions, discontinue drug and initiate appropriate therapy (epinephrine, antihistamines, and, in severe cases, corticosteroids). Consider allergy to excipients (furnished to physicians on request). *Hematologic:* (See also Allergic or Idiosyncratic) Agranulocytosis, aplastic anemia (rarely fatal). Thrombocytopenic purpura (rare). *Other:* Exacerbation of porphyric symptoms.

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# MATERNAL MORTALITY

## From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

On April 9, 1977, a 23-year-old, married, white, gravida 1, para 0, was seen at her ob-gyn doctor's office because of a brownish discharge. Her last menstrual period was February 14, 1977. She had a positive pregnancy test on April 2, 1977.

Examination at that time revealed a slight dilation of the external cervical os. It readily admitted a 14 Hegar dilator. The uterus was soft and slightly enlarged. The diagnosis of an incomplete abortion was made. The patient was admitted to a 300 + bed hospital for a D&C.

Physical examination at the hospital revealed a height of 5'5", weight 242 lb., B/P 140/80. ENT was negative. The heart was RSR with no murmurs. Pelvic examination revealed blood in the vagina. The cervix was a fingertip dilated. The uterus was anterior and slightly enlarged. The adnexae were not remarkable. On April 9, 1977, a D&C was performed. The tissue that was removed grossly resembled placenta. The patient tolerated the procedure well. Hg. was 12.2 gm.

The pathologist's report described "multiple pieces of fleshy spongy and membranous red gray tissue and blood clot that measured 7 × 6 × .5 cm. No embryonal tissue was seen grossly. The microscopic report revealed degenerating decidua. No chorionic villi were seen. The diagnosis was "deciduitis."

The patient was discharged and instructed to return to his office in four to six weeks. On April 14, 1977, at 11:00 p.m. the patient was seen in the emergency room of her hometown hospital complaining of nausea and severe abdominal pain. The patient was seen by her physician. Her B/P was 110/60. She was treated with Demerol 25 mg. and Phenergan 25 mg. IM and sent home.

The next morning on the 18th, the patient returned to the emergency room again complaining of severe abdominal pain. Blood was drawn for a CBC and Amalase. At 7:00 a.m. the Hgb. was 8.3 grams. At 7:20 a.m. she received 50 mg. of Demerol IM. At 8:00 a.m., pulse was 144, B/P 0/0 and the patient was

transferred via ambulance to the hospital where the original D&C was done with an IV going.

At 9:05 a.m. the patient arrived. She was unconscious. Pupils were dilated, B/P, pulse, and respirations were absent.

Cardio-pulmonary resuscitation was done. Nabicarbonate IV at 9:10 was given. At 9:25 Epinephrine 1:10 IV was given. Time of expiration is recorded as 9:22 a.m.

An autopsy showed ruptured right tubal pregnancy with a hemoperitoneum.

### Discussion

Ruptured ectopic pregnancy accounts for 11% of the maternal deaths in the United States. An ectopic pregnancy occurs in about one of every one hundred pregnancies. The most important laboratory procedure is a Hgb. and Hct. The urine pregnancy test is negative in 50% of the cases. The Beta subunit HCG or radio-receptive immune assay test for HCG level is capable of determining pregnancy even before the missed period. Ultrasound of the pelvis is helpful if a gestational sac is found outside the uterus. However, a "negative" ultrasound interpretation does not rule it out.

Predisposing factors are past history of pelvic inflammatory disease, IUD's, infertility, and previous tubal ligations.

Although there was only a "brownish discharge" the diagnosis of an incomplete or possibly even an early missed abortion was made on the basis of a positive pregnancy test, a slightly enlarged uterus and a "dilated" cervix in a Primagravida. A D&C was done. Grossly the tissue appeared to be placenta and the patient was discharged the following morning.

The pathologist's diagnosis of "deciduitis with no chorionic villi" seen should immediately alert the physician of the possibility of an ectopic (outside the endometrial cavity) pregnancy. At this time a serum Beta subunit HCG level or radio-receptive immune assay test for HCG level should be done immediately. No doubt, with this patient's obesity an adequate pelvic even under general anesthesia was difficult.

If the patient is fortunate enough to have an alert physician, a culdocentesis, or colpotomy, or (laparoscopic exam in a non-obese patient) can be done to further rule out or in an ectopic pregnancy.

Once the pathological diagnosis of "deciduitis" was received an ectopic pregnancy should have been thought of immediately and investigated. It should not be necessary and would be medico-legally damaging (for the pathologist to suggest on his report to consider an extrauterine pregnancy.)

It is unfortunate in the emergency room on the night of April 17th that her personal physician did not think of an ectopic pregnancy or even get a Hgb. and Hct. Perhaps, in a small hospital (number of beds not known) a CBC and other lab work is not available after a certain evening hour. A low Hgb. at that time might have suggested a diagnosis or prompted an admission—either of which might have saved this 23-year-old woman's life. 25 mg. of Demerol in a 242 lb. patient with severe abdominal pain is truly homeopathic. One also wonders if there was a general surgeon available in this small hospital who could have taken

over this patient's care immediately and saved this patient a 45-minute ride to a different hospital only to have her pronounced dead.

#### Summary

1. Ectopic pregnancy continues to add to the maternal mortality in the state of Kentucky.
2. If no chorionic villi are found, or only decidua is reported on the pathological diagnosis, think of an extrauterine pregnancy.
3. Get a serum Beta subunit HCG level or a radio-receptive immune assay test for HCG level if possible where it is available.
4. Give the patient and her family an "Ectopic Pregnancy" warning.
5. An alert obstetrician should always be on the watch for the ectopic pregnancy. He continually says to himself, "Have I missed any ectopic pregnancies today?"
6. Obesity is ever the enemy of the obstetrician.

CHARLES OBERST, M.D.  
Louisville, Kentucky

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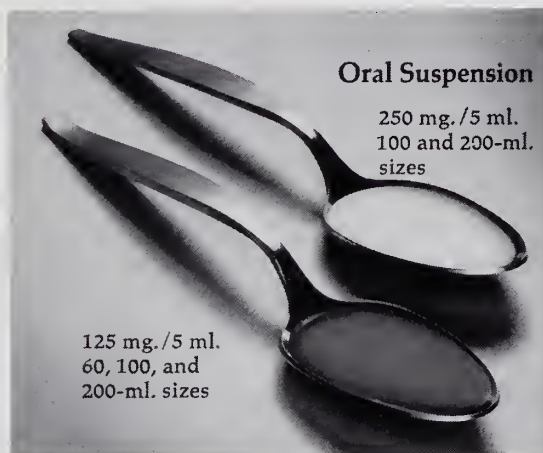
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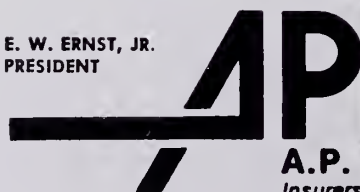
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# Report From KMA Cancer Committee—

## Oncology Nursing: Development of a Specialty

The purpose of this article is to inform the physicians in Kentucky concerning the growth of the specialty of oncology nursing. The passage of the National Cancer Act in 1971 has stimulated programs in service, education and research. Nurses have been actively involved in all of these areas as members of interdisciplinary teams. Due to the rapid growth of knowledge and development of expertise in the field of oncology, there has been a need for nurses to periodically meet, share progress and stimulate one another to more research. The Oncology Nursing Society was founded in 1973 to fulfill these objectives. Since that time it has grown in membership from 60 to 1900, developed a professional scientific publication, held annual meetings, collaborated with other organizations to develop Standards of Care and addressed content in nursing curricula.

### Historical Overview

Cancer is one of the diseases of man that has been recorded since 2500 B.C. Periodically, it has been focused upon with a particular aspect studied in great detail. As a result, much knowledge has accrued related to the many diverse aspects of this disease.<sup>1</sup>

Although medicine and nursing have worked together in planning the care of the patient, goals of each have been different. Medicine's goal has been related to cure with emphasis on long life, while nursing's goals have focused on symptomatic care and quality of that life. Both are vital goals in patient care.

Nurses who cared for cancer patients before the 1970's were primarily providing applied general principles of medical and surgical nursing with little specific knowledge of the disease itself. The educational offerings available focused on these principles. There was an increased interest in care of the dying, since many patients were seen in practice at this stage of disease. Little was known about how patients lived with

the disease between primary treatment and terminal care. In recognizing the fact that cancer is a chronic disease and that a simple cure may not be found, interest and hope occasionally waned.

### Renewed Interest

With the passage of the National Cancer Act in 1971, both interest and hope have been stimulated. Programs involving service, education and research have been developed with emphasis on the team approach.<sup>2</sup> While working toward the goal of discovering the causes and cure of cancer, these teams began accumulating a comprehensive body of knowledge. Those who studied the cause of cancer examined the environment, health habits, epidemiology, virology, and other areas. In exploring treatment modalities, surgery, chemotherapy, radiotherapy and immunotherapy were researched. The contribution of this knowledge to nursing practice has been significant, i.e., many new drugs have been developed and used in clinical trials. Nurses who are involved in the care of patients on protocols witnessed the effects of these drugs. Often the side effects were worse than the natural course of the disease itself. Due to the specialized nature of the treatment, nursing procedures were developed for the specific problems of these patients. As additional nurses entered the field of oncology, there was a need to expand and develop basic and continuing educational offerings to prepare them for their roles. Core courses in oncology are offered at colleges and comprehensive cancer centers for this purpose.

As the response rate to the combined treatment modalities grew and periods of remission were longer, hope also began to grow. Nursing research was conducted on the problems confronted in response to treatment, side effects, coping mechanisms and many other aspects. Working on isolated projects, these nurses began to realize a need to communicate their findings and to collaborate on those problems which were still unsolved. Oncology nursing as a specialty emerged.

### Specialty Organization is Founded

In 1973 the First National Cancer Conference was sponsored by the American Cancer Society and the American Nurses Association. After this conference, a group of the participants met to discuss the need to

*This article was written by MaryAnn Leonhardt Rand, R.N., Cancer Center, University of Louisville, Louisville, Ky.*

organize a mechanism to communicate with other oncology nurses. They identified as their prime concerns education, development of learning tools and collaboration. Most had been members of separate professional organizations in nursing and in oncology, so expertise was available. The organizations they had been associated with were the American Cancer Society, the American Society of Clinical Oncology, the American Association for Clinical Research and the American Nurses Association. The result of this organizational meeting was the founding of the Oncology Nursing Society. By January of 1974, a newsletter was circulated to approximately 60 oncology nurses. As these nurses with organizational, educational and clinical expertise began consulting with one another, the membership grew and needs were identified.

The Oncology Nursing Society was officially incorporated in 1975. It has held annual meetings in conjunction with the American Society of Clinical Oncology and the American Association for Clinical Research.<sup>3</sup> Participation in this annual event has grown from 200 in 1976 to 1157 in 1979. Membership in the Society has grown to more than 1900. Subjects covered at the annual meetings have ranged from general topics on the philosophy of care and legal dimensions of the specialist to the specific actions and side effects of investigational drugs. It has expanded from a one-day conference to a three-day program with concurrent sessions in education, practice and research.

*The Oncology Nursing Forum*, the vehicle of communication which reaches the membership between annual meetings, has developed from a simple newsletter into a professional publication. In addition to news of the organization and its members, it includes information on new drugs and techniques, upcoming conferences, nursing positions, bibliographies, and other items of interest. Acceptance of articles by the editorial board are based on quality, originality, depth and clarity of content.<sup>4</sup>

#### Local Needs Met

As the interest in oncology nursing grew and expanded, so did the need for nurses to communicate on a local level. Numerous groups began meeting in several different states. Among these were the Oncology Nurses Association, founded in Louisville in the summer of 1977. This organization was originally started with the idea of becoming a local chapter for the Oncology Nursing Society. When guidelines for charters of local chapters were not immediately developed, the group developed their own by-laws and continued meeting monthly. They provided continuing education programs with contact hours credited by the Kentucky

Nurses Association and mailed out a newsletter to members and other interested nurses. At present, they have identified a community project and have gathered information to provide background in seeking funding. The project is aimed at finding low cost, convenient housing for patients who travel distances for outpatient diagnosis or treatment. Correspondence is continuing with the national organization related to obtaining a charter as a local chapter.

#### Evaluation of the Specialty

Professional organizations have the responsibility to develop criteria for peer review of their members. The Oncology Nursing Society and the American Nurses Association have collaborated to publish *Outcome Standards for Cancer Patients*. The focus of these standards is primarily on the optimal functioning of patient and family related to living with cancer as a chronic disease, regardless of stage or prognosis. These standards were developed to be used to assess patient care in nursing audits.<sup>5</sup>

From the beginning the Oncology Nursing Society has been vitally interested in educational preparation and continuing education of practicing oncology nurses. For this purpose, the educational committee has developed a philosophy, objectives and projected activities to study this subject. The activities include developing guidelines for program curricula, researching nursing resources and maintaining a list of educational offerings for oncology nurses. They have collaborated with the American Nurses Association and the nursing committee of the American Association for Cancer Education.

#### Conclusion

Oncology nursing as a specialty has emerged as a result of renewed interest, research and a need identified by those nurses working in the field. It continues to develop as criteria for professional growth are met. The prime purpose of the care of the cancer patient is "caring" for his welfare. Oncology nurses have recognized this concept as a basis for their practice.

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## On Relicensure and Recertification

### The Story of John Goodman

Joseph C. Finney, M.D., Lexington, Kentucky

John Goodman was a good man, respected by his colleagues and liked by his patients. He graduated from a good college and a good medical school. After an internship and residency, he had practiced psychiatry for many years. When John was 55 his life began to be affected by relicensure and recertification requirements.

One day a letter came in the mail from his specialty board. All specialty certifications had been retroactively given expiration dates. To renew his board certification, John must take a new examination. At first, John didn't feel too bad about that. After all, he had been working in his field for more than 25 years after his residency and he felt at home in it. He went to take the examination confidently.

A letter notified him: Too bad, old boy: you've failed! How? John had not kept up with the recent theoretical debates in the psychoanalytic journals. Besides, he'd flubbed a question on Eric Berne's reinterpretation of Little Red Riding Hood. Worse, he'd drawn a blank on Primal Scream.

"But I don't practice any of those things. My work is psychopharmacology!", he protested in vain.

"Too bad, buddy. You don't define your field. We do," he was told.

A friend of John's, a psychoanalyst who had done well on all the above questions, failed the examination too. Why? Because he didn't know the voltage to be used in electro-convulsive therapy. "But I don't need to know that! I've never given an electric shock and I never intend to!", protested the psychoanalyst. He got the same curt reply that John did.

Next month, John Goodman received a letter from the National Health Service. "Dear Doctor: . . . Since you are no longer board-certified in your former specialty, you must understand that you can no longer work in that capacity . . . We are reassigning you to an entry-level position in general medicine at a lower salary."

John tried to take it as a good sport. After all, there was nothing disreputable about practicing general medicine. He boned up on a few things, and he did his job well.

The next year, when he was 56, John Goodman received another letter.

"Dear Doctor: . . . As you know, your license to practice medicine, and your M. D. degree, will expire this year. If you wish to renew them, you must take an examination covering the four years of medical school as taught nowadays. You will take the examination in competition with senior students graduating from medical schools."

John hove a sigh and, with a resigned air, took the examination. He had no fears. He had treated patients successfully for 30 years.

The graduating seniors all passed, but doctors with 30 years' experience were slaughtered. Surgeons failed psychiatry and psychiatrists failed surgery. John failed because he couldn't draw the structural formulas of some esoteric new chemicals that he'd never encountered.

John protested. "But I treat my patients far more competently than these graduating seniors who passed!"

"Sorry, but that's not the name of the game," was the answer.

It was only a few weeks until a letter came: "Dear Mr. Goodman: . . . Since you no longer have an M. D. degree nor a state license, we can no longer employ you as a physician . . ."

John shrugged. "My life isn't over. I still have a B. A. degree. I'll apply for a job as a laboratory technician."

He got the job. The pay was lower, but he could survive. He sold his house and moved into an apartment. John did good work as a lab technician.

The next year, when he was 57, John Goodman received another letter.

"Dear Mr. Goodman: . . . Your bachelor's degree will expire this year. If you wish to renew it, you must take the examination next month, covering four years of undergraduate college study."

Enough is enough! thought John. But who could fight the system? The periodic expiration of all degrees and diplomas was firmly fixed in the law. The purpose, of course, was to protect the public.

John took the examination for renewal of his B. A. degree. He took it with confidence. After all, he had graduated with honors 35 years before.

Soon came a letter notifying him of rejection. He had not quite passed the German language section; he had put the umlaut on the wrong vowels. Not only that, he was weak in modern geometry and astronomy, too; plate tectonics were beyond him; and he had not kept up well with economics.

The inevitable follow-up letter came, too. "Dear Mr. Goodman: . . . Since you no longer have a B. A. degree, you must understand that we can no longer employ you as a laboratory technician. You must understand that we are obliged to protect the public . . ."

Heaving a sigh, John went to the hospital employment office and found a job open as a receptionist, a job that required only a high school diploma. Of course, this meant another reduction in pay, but it was better than starving.

John did a good job as a receptionist, too. He could direct the patients to the doctors' offices very well.

The next year, at the age of 58, another letter came to John Goodman. "Dear John: . . . Your high school diploma will expire next month. If you wish to renew it, you must apply to take the examination . . ."

Wearily, John applied. How much longer could this go on? Well, at least he should renew his high school diploma with flying colors. After all, he was valedictorian of his high school graduating class 40 years earlier.

Unfortunately, he found too late, high schools had changed in 40 years. Drivers' education was now a required course for graduation, and John did not do well on the question dealing with the Wankel engine.

The letter informed John that he had lost not only his high school diploma, but also his drivers' license. Of course, without a high school diploma, he could no longer work as a receptionist.

Never give up, thought John. If he couldn't be a receptionist, surely he could still do something. He applied for a job sweeping the floors. The pay was lower, but it was a job, and only a grade school education was required.

The next year, at the age of 59, John received another letter. His grade school diploma would expire next month. To renew the diploma, and keep the job that required it, John must take another examination.

Wearily, John took the examination. This was his last effort. Surely he could keep his last defense.

But no. Grade school had changed in 45 years. John didn't know septal and octal numbers. What was 65 X 56 in septal? John calculated the only way he knew and put 3640. But the right answer was given as 13420.

Inevitably, the letter came. "Since you are no longer a grade school graduate, we can no longer employ you to sweep the floors."

John found the only job that didn't require a grade school diploma. It was operating an elevator. But his heart wasn't in it.

John died before reaching the age of 60. He had lost the will to live.

He was buried in an unmarked grave. After all, what more could be expected for someone without even a grade school diploma?

**Watch for special program on KMA Physician Recruitment Fair**

**7:30-8:30 p.m.**

**KET**

**December 4, 1979**





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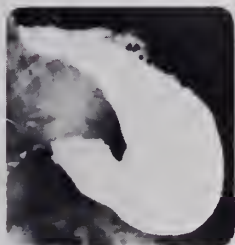
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In this double-blind study, twenty patients having G.I. series and exhibiting spasm were randomly selected to receive either 2 cc. of Bentyl or sodium chloride intramuscularly. Ten minutes after the injection another radiograph was taken . . .

. . . Bentyl produced definite relaxation in 8 of 10 patients. The sodium chloride produced relaxation in only 3 of 10. No side effects occurred in either group of patients.



Pylorospasm has almost totally blocked passage of barium meal.



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*"The correlation of spasm relief and drug given was excellent."*

\*This drug has been classified "probably" effective in treating functional bowel/irritable bowel syndrome.

†See Warnings, Precautions and Adverse Reactions.

See following page for prescribing information.

#### Reference:

King, J.C. and Starkman, N.M.: Evaluation of an antispasmodic. Double-blind evaluation to control gastrointestinal spasms occurring during radiographic examination. A preliminary report. Western Med. 5:356-358, 1964.

# Merrell

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Brief Summary

#### INDICATIONS

Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the following indications as "probably" effective:

For the treatment of functional bowel/irritable bowel syndrome (irritable colon, spastic colon, mucous colitis) and acute enterocolitis.

THESE FUNCTIONAL DISORDERS ARE OFTEN RELIEVED BY VARYING COMBINATIONS OF SEDATIVE, REASSURANCE, PHYSICIAN INTEREST, AMELIORATION OF ENVIRONMENTAL FACTORS.

For use in the treatment of infant colic (syrup).

Final classification of the less-than-effective indications requires further investigation.

**CONTRAINDICATIONS:** Obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); obstructive disease of the gastrointestinal tract (as in achalasia, pyloro-duodenal stenosis); paralytic ileus, intestinal atony of the elderly or debilitated patient, unstable cardiovascular status in acute hemorrhage; severe ulcerative colitis; toxic megacolon complicating ulcerative colitis; myasthenia gravis. **WARNINGS:** In the presence of a high environmental temperature, heat prostration can occur with drug use (fever and heat stroke due to decreased sweating). Diarrhea may be an early symptom of incomplete intestinal obstruction, especially in patients with ileostomy or colostomy. In this instance treatment with this drug would be inappropriate and possibly harmful. Bentyl may produce drowsiness or blurred vision. In this event, the patient should be warned not to engage in activities requiring mental alertness such as operating a motor vehicle or other machinery or perform hazardous work while taking this drug. **PRECAUTIONS:** Although studies have failed to demonstrate adverse effects of dicyclomine hydrochloride in glaucoma or in patients with prostatic hypertrophy, it should be prescribed with caution in patients known to have or suspected of having glaucoma or prostatic hypertrophy. Use with caution in patients with Autonomic neuropathy. Hepatic or renal disease. Ulcerative colitis. Large doses may suppress intestinal motility to the point of producing a paralytic ileus and the use of this drug may precipitate or aggravate the serious complication of toxic megacolon. Hyperthyroidism, coronary heart disease, congestive heart failure, cardiac arrhythmias, and hypertension. Hiatal hernia associated with reflux esophagitis since anticholinergic drugs may aggravate this condition.

Do not rely on the use of the drug in the presence of complication of biliary tract disease. Investigate any tachycardia before giving anticholinergic (atropine-like) drugs since they may increase the heart rate. With overdosage, a curare-like action may occur. **ADVERSE REACTIONS:** Anticholinergics/antispasmodics produce certain effects which may be physiologic or toxic depending upon the individual patient's response. The physician must delineate these. Adverse reactions may include xerostomia; urinary hesitancy and retention; blurred vision and tachycardia; palpitations; mydriasis; cycloplegia; increased ocular tension; loss of taste; headache; nervousness; drowsiness; weakness; dizziness; insomnia; nausea; vomiting; impotence; suppression of lactation; constipation; bloated feeling; severe allergic reaction or drug idiosyncrasies including anaphylaxis; urticaria and other dermal manifestations; some degree of mental confusion and/or excitement, especially in elderly persons; and decreased sweating. With the injectable form there may be a temporary sensation of lightheadedness and occasionally local irritation. **DOSAGE AND ADMINISTRATION:** Dosage must be adjusted to individual patient's needs.

**Usual Dosage:** Bentyl 10 mg. capsule and syrup: *Adults:* 1 or 2 capsules or teaspoonfuls syrup three or four times daily. *Children:* 1 capsule or teaspoonful syrup three or four times daily. *Infants:* ½ teaspoonful syrup three or four times daily. (May be diluted with equal volume of water.) Bentyl 20 mg.: *Adults:* 1 tablet three or four times daily. Bentyl Injection: *Adults:* 2 ml. (20 mg.) every four to six hours intramuscularly only. **NOT FOR INTRAVENOUS USE.** **MANAGEMENT OF OVERDOSE:** The signs and symptoms of overdose are headache, nausea, vomiting, blurred vision, dilated pupils, hot, dry skin, dizziness, dryness of the mouth, difficulty in swallowing, CNS stimulation. Treatment should consist of gastric lavage, emetics, and activated charcoal. Barbiturates may be used either orally or intramuscularly for sedation but they should not be used if Bentyl with Phenobarbital has been ingested. If indicated, parenteral cholinergic agents such as Urecholine<sup>®</sup> (bethanecol chloride USP) should be used.

Product Information as of October, 1978.

Injectable dosage forms manufactured by CDNNAUGHT LABORATORIES, INC., Swiftwater, Pennsylvania 18370 or TAYLOR PHARMACAL COMPANY, Decatur, Illinois 62525 for MERRELL-NATIONAL LABORATORIES, Division of Richardson-Merrell Inc., Cincinnati, Ohio 45215, U.S.A.

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# BOOK REVIEWS

## Brain Surgeon

Lawrence Shainberg, Lippincott, 275 pages.  
Copyright 1979

To spare the potential reader I offer a warning that "Brain Surgeon" is neither a scientific work nor a bedside pastime. Herein lay its strength and attraction, and unfortunately its weakness and repulsion.

Much of the book is filled with partial and occasional sensational detail of the neurosurgical microcosm. The initial rotation of current neuroscience services makes this material redundant for all but the medically amateur. The other theme is the author's intrigue with and analysis of the mind-brain relationship. He vacillates from the psychoanalytic dissector, using the encounters with pre- and post-operative patients as his material, to the excited observer of neurosurgical operative drama. He sympathetically synthesizes the picture of one of medicine's current dilemmas—the patient as a person versus a disease—and how different physicians react to it.

The chronicle of several selected patient's sojourn in the neurological milieu is accurate but dramatic at times. Nevertheless the reading is both effortless and informative. His role as an observer of the practicing brain surgeon's world is informative and unique. Expressing in words the world of neurological disease and its care bridges the gap from glamor to expose with perhaps a slant to the neurosurgical theatre.

Whether "Brain Surgeon" enlightens our understanding of the mind brain dichotomy is for the judgement of the reader. No factual material is presented or probably intended.

I am unsure of its place in the medical literature but perhaps its existence may excite the reader to explore the world of the human brain.

STEPHEN Z. SMITH, M.D.  
Louisville, Kentucky

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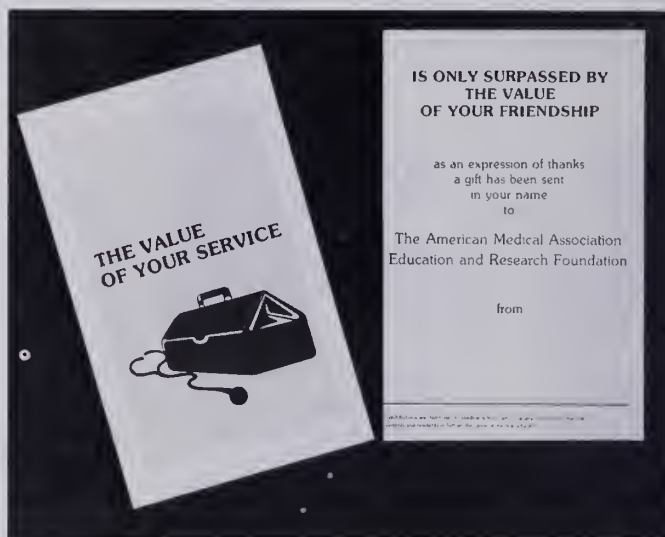
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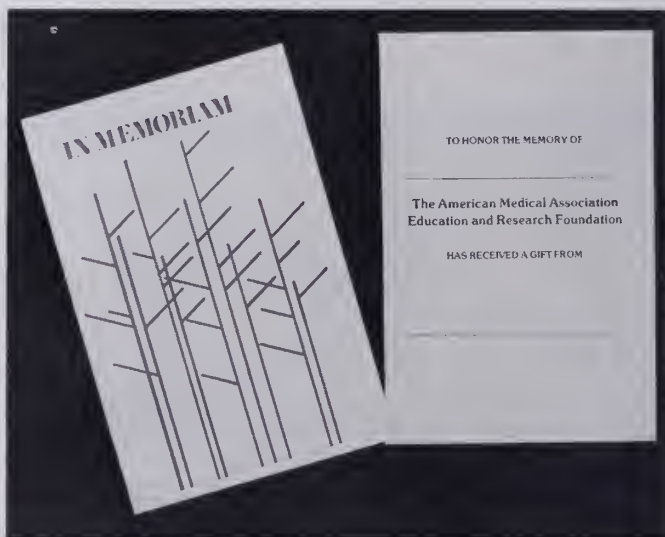
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## EDITORIAL

### Do We Do Too Much?

**T**HE following is a personal prejudice.

I am concerned that there are far too many patients with recently developed angina subjected to coronary arteriography and subsequently advised to have coronary bypass surgery. The argument for the above is on the surface persuasive—need to know the extent of the disease, 60% five year mortality in untreated three vessel diseases, etc.

However, to subject a patient with recently developed angina to arteriography to define the extent of disease is at best reflex action, at worst assembly line medicine. Rather, every patient with angina of recent onset should be given the benefit of cessation of smoking, weight loss, Ipropanolol, judicious exercise and long-acting nitrates in order of decreasing importance.

If angina persists, then arteriography could be considered. If the above regime is recommended and followed most patients improve.

Does coronary bypass surgery do anything more than relieve pain? There is no firm assurance that it either prolongs life or prevents future myocardial infarctions. There is at least a 2% mortality from surgery with the best selection process and in the best surgical hands. There is also the considerable incidence of perioperative myocardial infarction (10-15% or more).

In the face of these risks and dubious benefits, all primary care physicians must refer selectively for coronary angiography and bypass.

This involves resisting the pressure of "medical progress." This pressure is brought to bear by well-meaning but ill-informed family, lay press and our own colleagues.

The ultimate responsibility for proper action lies with the primary care physician, not the cardiologist or the heart surgeon.

PCG

### Four Strings To His Bow

**G**REAT events frequently cast a shadow foretelling their creation. I had a reassuring sense of "deja-vu" earlier this month when Robert S. Howell, Louisville, was inducted as President of the Kentucky Medical Association. I have seen him perform ably and I feel most comfortable in his being selected.

He brings to the office a combination of qualities that will serve our state and its medical districts well. He carries experience in administrative abilities from running a busy pathology department in a large community hospital to serving as president of our county medical society.

Before his formal training in pathology, Bob Howell had four years in private practice, so he has had a touch of the problems and needs of the man in the front trenches.

A third string to his bow is his affiliation with the Louisville School of Medicine in the Department of Pathology as volunteer faculty in addition to serving on the Board of Admissions.

Yet, all of the above will pale when compared to his fourth character . . . the person. Call it moral fiber, call it a sense of decency, call it trustworthiness or any other attribute man may possess. Robert S. Howell will encompass all of these in his leadership role. He is a team player who will listen to opposing or contrary views. He has both the time and the inclination to attend committee meetings locally and in the state. His relaxed manner and enthusiasm will infect those with whom he associates.

Bob, we welcome you and your leadership for this year. The success you have will bear us all good fruit.

MFH



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### Cost Cut Corner

#### NOVEMBER—Preparing a patient information booklet.

Improved patient relations and saved time are just two benefits of a patient information booklet, regardless of your specialty or type of practice. A short, simple, inexpensively produced booklet can create good will among patients and save your staff countless hours of repetitive explanations. Practice management consultants point out for example, that patient information booklets can reduce, by an average of 20 to 30 percent, the number of incoming phone calls received by a medical office. To learn more about how you can prepare a booklet and some suggestions on what might be included call or write the KMA Headquarters Office or order "Preparing a Patient-Information Booklet" (OP-44) directly from the American Medical Association Order Department, 535 North Dearborn Street, Chicago, Illinois 60610.



## Insurance Update

# Kentucky Medical Insurance Program Report

During the last few months this page of the Journal has been devoted to some philosophical aspects of professional liability insurance using specific topics that have, hopefully, been of interest and benefit to Kentucky physicians. This month philosophy is being set aside and this space utilized to deal in realities as they apply to our own insurance organization, the Kentucky Medical Insurance Company.

It is common practice for stock companies to make periodic reports to stockholders. Our first four months are now behind us, and we believe a "progress report" should be shared with all physicians and not be confined only to our 900+ stockholders. Indeed, KMIC feels strongly that every Kentucky physician has an interest in KMIC because of the profound effect we have already had on the professional liability market in this state. This benefits all physicians, not just our stockholders and policyholders.

We are pleased to report that our physician-owned insurance organization has issued 281 professional liability policies during its first four months of operations. Direct premiums written during the four months from June 1 through September 30 of this year totaled \$638,000. Aggregate stock purchases in KMIC have passed \$1,550,000 and the Company's assets are in excess of \$1,962,000.

KMIC's growth and financial progress are ahead of our initial projections by a considerable amount. For example, we had projected \$700,000 in written premium for the first seven months of operation (June 1 to December 31). With \$638,000 after only four months, it is obvious our projection will be exceeded. We now

anticipate that KMIC will pass the \$1 million mark in direct premiums written early in 1980. This will be a remarkable achievement for our young company.

This growth reflects the strong interest and support being demonstrated by Kentucky physicians in their own insurance company. There may be several reasons for this interest and support, but two reasons have been specifically voiced to me over the past few months.

The product itself—our contract of insurance—is unsurpassed. KMIC offers the occurrence policy, by far the most desirable when compared with other policy forms available, with a choice of primary limits and the option of excess coverage (placed with another company). Unqualified policyholder consent is required for the settlement, prior to judgment, of any claim covered by the policy. The KMIC policy even provides for the payment of punitive damages.

Secondly, Kentucky physicians are very receptive to the concept of having their own company—of having a voice in the operation of the company and being in a position, as owners of the company, to participate in its earnings. The Kentucky physicians on our Board of Directors provide input based on your concerns and interests in all areas of the company's operations. With KMIC, you are both a policyholder and a stockholder.

We are proud of the early growth of KMIC and of the manner in which Kentucky physicians have responded. After only four months it certainly appears that our own company will be a greater success than any of us had initially anticipated. We look forward to providing periodic progress reports in the future.

RILEY LASSITER  
Executive Vice President  
Kentucky Medical Insurance Company

## Highlights of 1979



KMA officers for 1979-80 are (left to right): S. Randolph Scheen, M.D., Louisville, Secretary-Treasurer; Frank R. Pitzer, M.D., Hopkinsville, President-Elect; Robert S. Howell, M.D., Louisville, President; and Richard J. Menke, M.D., Crestview Hills, Vice President.



# KMA Annual Meeting

## Officers

Frank R. Pitzer, M.D., Hopkinsville and Richard J. Menke, M.D., Crestview Hills, are the newly elected KMA President-Elect and Vice President respectively.



Doctor Pitzer

The House of Delegates elected the two new officers at this year's Annual Meeting of the Kentucky Medical Association. Doctor Pitzer, a pathologist at the Jennie Stuart Hospital in Hopkinsville, has served as Third District Trustee for the KMA since 1973. He is a 1961 graduate of the University of Tennessee College of Medicine, Memphis, where he was Assistant Professor of Pathology from 1964 to 1966.

Doctor Pitzer is also a consulting pathologist in the Clarksville Memorial Hospital, Clarksville, Tennessee and the Western State Hospital in Hopkinsville. He is a member of the American Medical Association, Southern Medical Association, Kentucky Society of Pathologists and American College of Pathology.

Richard J. Menke, M.D., Crestview Hills, is in private practice of orthopaedic surgery. He has served as Eighth District Trustee of the KMA since 1974.

Doctor Menke is a 1953 graduate of the St. Louis University School of Medicine. He is on active staff at St. Elizabeth Hospital and courtesy staff at St. Luke Hospital.

Doctor Menke is a member of Campbell-Kenton Medical Society, American Medical Association, Kentucky Orthopaedic Society and American Academy of Orthopaedic Surgeons.

Reelected to a two-year term as Delegates to the AMA were Fred C. Rainey, M.D., Elizabethtown and David B. Stevens, M.D., Lexington. The other AMA Delegate is Harold D. Haller, M.D., Louisville. Lee C. Hess, M.D., Florence and Wally O. Montgomery, M.D., Paducah, were both reelected to two-year terms as Alternate Delegates to the AMA. Kenneth P. Crawford, M.D., Louisville, is also an alternate delegate to the AMA.

Former Vice Chairman of the KMA Board of Trustees, Dwight L. Blackburn, M.D., Berea, was elected this year's Chairman of the Board. He was replaced as Vice Chairman by William T. Watkins, M.D., Somerset, last year's Chairman of the Board of Trustees.

Doctor Blackburn is in family practice in Berea and is past president of the Madison County Medical Society. He was KMA Trustee from the Eleventh District from 1975 to 1978. Doctor Blackburn is active in the Chamber of Commerce and has been a member of the Board of Trustees for the Appalachian Fund since 1962.

Doctor Watkins, a pediatrician, served as Chief of Pediatrics and Chief of the medical staff at Somerset City Hospital. He is a voluntary assistant Professor of Pediatrics at the University of Kentucky Medical Center, Lexington. He is a member of both the Pulaski County Medical Society and the Kentucky Chapter of the American College of Pediatrics.

Newly-elected members of the KMA Board of Trustees are: William P. McElwain, M.D., Lawrenceburg, Seventh District; Henry R. Bell, M.D., Elkton, Third District to fill the unexpired term of Doctor Pitzer and Robert E. Smith, M.D., Covington, Eighth District to fill the unexpired term of Doctor Menke. Re-elected as Trustees were R.J. Phillips M.D., Owensboro, Second District; Don R. Stephens, M.D., Cynthiana, Ninth District; Richard F. Hench, M.D., Lexington, Tenth District and Howard B. McWhorter, M.D., Ashland, Thirteenth District.

Elected Alternate Trustees were Albert H. Joslin, M.D., Owensboro, Second District; Sam H. Traugher, M.D., Hopkinsville, Third District; Cecil D. Martin, M.D., Carrollton, Seventh District; William R. Yates, M.D., Covington, Eighth District; R. Kendall Brown, M.D., Georgetown, Ninth District; Colby N. Cowherd, M.D., Lexington, Tenth District and Ranjit Sinha, M.D., Morehead, Thirteenth District.



Fred C. Rainey, M.D., left, presents the Distinguished Service Award to Garnett J. Sweeney, Sr., M.D.

## President's Luncheon

Garnett J. Sweeney, Sr., M.D., Liberty, received the Distinguished Service Award at this year's President's Luncheon, September 26.

Chairman of the KMA Awards Committee, Fred C. Rainey, M.D., Elizabethtown, presented the award and praised Doctor Sweeney's dedication to the ideals of organized medicine. "He has practiced those (ideals) as a clinician and has been a constant spokesman for quality health care and compassion for people . . . This compassion and warm personality have endeared him to his patients, his colleagues and his many friends."

Doctor Sweeney was President of the Kentucky Academy of Family Physicians from 1954 to 1955. As a member of KMA he was elected 12th District Trustee and served two terms. In 1958 he was elected as Chairman of the Board of Trustees and from 1962 to 1965 was Speaker of the KMA House of Delegates. Doctor Sweeney is on staff at the Casey County Hospital. He has been in family practice in Liberty, Kentucky since 1940.

Guest speaker at the President's Luncheon was James H. Sammons, M.D., Executive Vice President of the American Medical Association. In his speech, Doctor Sammons criticized the Federal Trade Commission (FTC) for what he described as attacks on the medical Profession. He believes the FTC is trying to establish jurisdiction over physicians by not allowing them to decide what curricula will be taught in medical schools and prohibiting doctors from sitting on insurance boards, claiming it is a conflict of interest.

Many of the litigations confronting the medical profession today are insignificant in scope to the problems that governmental control of medicine would bring. Unity in medicine was a major point of Doctor Sammons message as he underscored the need for more physicians to support the organization that is the only thing between the government and their profession.



James H. Sammons, M.D., Executive Vice President of AMA, was guest speaker at the President's Luncheon.



Frank R. Lemon, M.D., Lexington, was presented the Educational Achievement Award during this year's KMA Annual Meeting.



Carl Cooper, Jr., M.D., gave the President's Address at the first meeting of the House of Delegates.



## House of Delegates

During the first session of the House of Delegates on September 24, Frank R. Lemon, M.D., Lexington, was presented the Educational Achievement Award by Doctor Cooper.

This is the first year the award has been presented. It was created to give recognition to those who have made a significant contribution in medical or medically related education in the areas of research, clinical application of medical practice and/or patient education.

Doctor Lemon, Associate Dean for continuing education at the University of Kentucky College of Medicine, has gained recognition across Kentucky and nationally as a leader in physician education.

In 1976 he was appointed associate chief of staff for education at the Veterans Administration Hospital in Lexington. Doctor Lemon is also past chairman of KMA's CME Committee.

Other activities during the first meeting of the House of Delegates included official introduction of the reports of the KMA committees, deliberation of the resolutions and the report of the Rules Committee. The Rules Committee was established in 1978 to advise the Speaker on the conduct of the House sessions.



The first meeting of the House of Delegates was held on September 24 during the Annual Meeting.



Victor F. Duvall, M.D., Clarkson, stepped to the microphone to add his views to discussions of resolutions at the second meeting of the House.



Speakers from the head table address delegates during the second meeting of the House.



Lowell H. Steen, M.D., left, Chairman of the AMA Board of Trustees and Hoyt D. Gardner, M.D., AMA President, attended the House meeting on September 24.

Chairman of the AMA Board of Trustees, Lowell H. Steen, M.D., from Hammond, Indiana addressed the Delegates at the first meeting and discussed current AMA activities such as membership efforts, continuing medical education, legislation, status of various AMA legal actions and liability insurance.

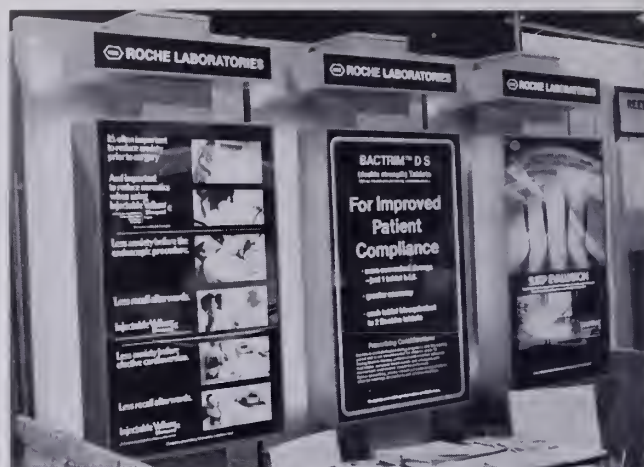
Doctor Steen also presided over an AMA official Family Briefing which was given to the members of KMA Board, specialty groups and county society officers on Sunday, September 23. The briefing highlighted current AMA goals and provided an update on the status of litigation involving the Federal Trade Commission and chiropractors.

The second session of the House of Delegates convened on Wednesday evening with the Delegates voting on a number of major issues to establish KMA policy.

—Resolution A, submitted by Daviess County Medical Society, addressed the issue of the requirement for hospital staff privileges that every member have insurance coverage or show fiscal responsibility. It was decided that this issue should be left up to each individual staff and that KMA would oppose any attempt by the hospital insurer to mandate staff coverage as a condition for membership.



Lowell H. Steen, M.D., Chairman of the AMA Board of Trustees, addressed specialty group representatives, members of the Board and other guests at the "official AMA family briefing."



Above  
During intermissions between meetings and scientific sessions, guests at the Annual Meeting visited technical and scientific exhibits.



Below

- The status and progress of the Kentucky Medical Insurance Company were noted and all members were urged to participate in this KMA owned and operated venture.
- In the legislative area, the Delegates approved a resolution that established guidelines for physician's assistants (PA's), which included the policy that PA's should be graduates of accredited institutions certified through a national process; that there be no more than two PA's working under any one physician; and that jurisdiction for PA's should be maintained by the Board of Medical Licensure.
- The use of pharmaceuticals by optometrists was opposed and legislative reform was directed.
- The House called for a statutory definition of death to be developed that would allow a physician in the exercise of his professional judgement to declare an individual dead, based on irreversible cessation of brain functions.
- Relating to governmental medical programs, the Delegates opposed routine direct provision of services through Boards of Health and called for efforts directed to strengthening the proper functions of local health departments.
- The Delegates also went on record in opposition to non-Medical child health and geriatric screening programs offered through health departments and voted to oppose Medicare reimbursement based on geographic areas.

**The Kentucky Medical Association  
acknowledges with thanks  
the program support they received from:**

**A.H. Robins Co., Inc., Richmond, Virginia  
Bristol Laboratories, Syracuse, New York  
Schering Labs, Louisville, Kentucky  
The Upjohn Company, Cincinnati, Ohio**





Oneida Betts, AKMA President and Carol Franks, Chairperson of AKMA American Medical Association-Education Research Foundation committee worked at the committee's booth during the Annual Meeting. Money from the sales will go to medical schools in Kentucky.

# KMA Annual Meeting September 22-25 1980 Ramada Inn Bluegrass Convention Center Louisville, Kentucky

—Socioeconomic issues included adoption of the report of the Ad Hoc Committee on Health Care Costs, which developed some 21 recommendations in the area of cost monitoring, to be carried on by individual physicians and the Association, and went on record to disassociate itself on a formal basis with Blue Cross and Blue Shield's Usual, Customary and Reasonable program.

Five physicians were elected by the House of Delegates at its final session to serve on the 1980 Nominating Committee. Committee members for 1980 are: Thomas M. Marshall, M.D., Louisville, Chairman; James S. Brashear, M.D., Central City; James A. Baumgarten, M.D., Owensboro; Cecil D. Martin, M.D., Carrollton and C. Kenneth Peters, M.D., Jeffersonton.

The Committee is responsible for presenting a slate of candidates for all elective offices within the structure of KMA to the House of Delegates at the 1979 Annual Meeting.

The December 1979 issue of *The Journal* will contain the complete proceedings of the House of Delegates Meeting.

## Attendance

Two thousand seventy-nine people registered at this year's Annual Meeting in Louisville. This was a substantial increase from last year's attendance in Lexington. General scientific and specialty groups' sessions were well attended as were both meetings of the House of Delegates.

The 1980 KMA Annual Meeting is scheduled for September 22-25 at the Ramada Inn/Bluegrass Convention Center, Louisville. Problems with traffic congestion and construction at the Convention Center will be alleviated next year with the opening of the new Hurstbourne Lane interchange leading to the Convention Center. Construction at the Ramada Inn, which was inconvenient for some, will be finished soon. More than 150 new rooms will be available for next year's Annual Meeting.



Seventy technical exhibitors attended this year's meeting. Eighteen more exhibitors were on a waiting list and plans have been made to increase the exhibit area for next year.

## Was Your Delegate Present?

### ROLL CALL

#### 1979 House of Delegates

#### KMA Annual Meeting

#### OFFICERS

|                               |                        |         |         |
|-------------------------------|------------------------|---------|---------|
| Speaker                       | Bennett L. Crowder, II | Present | Present |
| Vice Speaker                  | Peter C. Campbell, Jr. | Present | Present |
| President                     | Carl Cooper, Jr.       | Present | Present |
| President-Elect               | Robert S. Howell       | Present | Present |
| Vice-President                | Harold L. Bushey       | Present | Present |
| Secretary-Treasurer           | S. Randolph Scheen     | Present | Present |
| Delegate to AMA               | Fred C. Rainey         | Present | Present |
| Delegate to AMA               | Harold D. Haller, Sr.  | Present | Present |
| Delegate to AMA               | David B. Stevens       | Present | Present |
| Alternate Delegate to the AMA | Kenneth P. Crawford    | Present | Present |
| Alternate Delegate to the AMA | Wally O. Montgomery    | Present | Present |
| Alternate Delegate to the AMA | Lee C. Hess            | Present | Present |

#### TRUSTEES

|            |                     |         |         |
|------------|---------------------|---------|---------|
| District   |                     |         |         |
| First      | Wally O. Montgomery | Present | Present |
| Second     | R. J. Phillips      | Present | Present |
| Third      | Frank R. Pitzer     | Present | Present |
| Fourth     | Charles P. Spalding | Present | Present |
| Fifth      | Walter E. Coe       | Present | Present |
| Sixth      | Earl P. Oliver      | Present | Present |
| Seventh    | William H. Keller   | Present | Present |
| Eighth     | Richard J. Menke    | Present | Present |
| Ninth      | Don R. Stephens     | Present | Present |
| Tenth      | Richard F. Hench    | Present | Present |
| Eleventh   | Dwight L. Blackburn | Present | Present |
| Twelfth    | William T. Watkins  | Present | Present |
| Thirteenth | Howard B. McWhorter | Present | Present |
| Fourteenth | Harvey A. Page      | Present | Present |
| Fifteenth  | Donald C. Barton    | Present | Present |

#### ALTERNATE TRUSTEES

|            |                    |         |         |
|------------|--------------------|---------|---------|
| District   |                    |         |         |
| First      | James E. Adams     | Present | Present |
| Second     | Albert H. Joslin   | Present | Present |
| Third      | Henry R. Bell      | Present | Present |
| Fourth     | Terrell D. Mays    | Present | Present |
| Fifth      | Glenn W. Bryant    | Present | Present |
| Sixth      | Martin Wilson, Jr. | Present | Present |
| Seventh    | William Powers     | Present | Present |
| Eighth     | Robert E. Smith    | Present | Present |
| Ninth      | Kelly G. Moss      | Present | Present |
| Tenth      | Colby Cowherd      | Present | Present |
| Eleventh   | Don E. Cloys       | Present | Present |
| Twelfth    | Danny M. Clark     | Present | Present |
| Thirteenth | George R. Bellamy  | Present | Present |
| Fourteenth | Jerry D. Fraim     | Present | Present |
| Fifteenth  | Emanuel H. Rader   | Present | Present |

#### PAST PRESIDENTS

|                |                 |         |         |
|----------------|-----------------|---------|---------|
| Past President | John P. Stewart | Present | Present |
| Past President | Paul J. Parks   | Present | Present |
| Past President | David A. Hull   | Present | Present |
| Past President | Hoyt D. Gardner | Present | Present |
| Past President | Fred C. Rainey  | Present | Present |

#### DELEGATES

##### FIRST DISTRICT

|            |                     |         |         |
|------------|---------------------|---------|---------|
| BALLARD    | R. Gary Marquardt   | Present | Present |
| CALLOWAY   |                     |         |         |
| CARLISLE   |                     |         |         |
| FULTON     | R. T. Peterson, Jr. | Present | Present |
| GRAVES     | C. Douglas Leneave  | Present | Present |
| HICKMAN    | C. J. Mills         | Present | Present |
| LIVINGSTON | Stephen Burkhart    | Present | Present |
| MCCRACKEN  | James C. Embry      | Present | Present |
|            | Larry C. Franks     | Present | Present |
|            | Ben Taylor          | Present | Present |
|            | W. Eugene Sloan     | Present | Present |
| MARSHALL   | Keith Ellis         | Present | Present |

##### DAVIESS

##### HANCOCK HENDERSON

##### McLEAN

##### OHIO UNION WEBSTER

##### CRITTENDEN HOPKINS

##### PENNYRILE MULTI- COUNTY SOCIETY CALDWELL CHRISTIAN

##### LYON

##### MUHLBERG TODD TRIGG

##### BRECKINRIDGE BULLITT GRAYSON GREEN HARDIN HART

##### LARUE MARION MEADE NELSON TAYLOR WASHINGTON

##### JEFFERSON

#### SECOND DISTRICT

|                        |         |         |
|------------------------|---------|---------|
| James Baumgarten       | Present | Present |
| R. Glenn Greene        | Present | Present |
| Albert H. Joslin       | Present | Present |
| Donald R. Neel         | Present | Present |
| John Sanders (Alt.)    | Present | Present |
| B. Presley Smith       | Present | Present |
| Kenneth M. Eble        | Present | Present |
| John W. McClellan      | Present | Present |
| W. G. Edds             | Present | Present |
| Hugh H. Wilhite (Alt.) | Present | Present |
| Robert E. Norsworth    | Present | Present |

#### THIRD DISTRICT

|                         |         |         |
|-------------------------|---------|---------|
| Wallace R. Alexander    | Present | Present |
| Richard K. Bachmann     | Present | Present |
| C. R. Dodds             | Present | Present |
| N. H. Talley            | Present | Present |
| G. A. Payne (Alt.)      | Present | Present |
| William Rowlett         | Present | Present |
| H. B. Stone (Alt.)      | Present | Present |
| Sam Traugher (Alt.)     | Present | Present |
| William C. Young        | Present | Present |
| Delmas M. Clardy (Alt.) | Present | Present |
| M. H. Mosely            | Present | Present |
| James S. Brashear       | Present | Present |
| Larry O. Brock          | Present | Present |
| Eduardo Paxon           | Present | Present |

#### FOURTH DISTRICT

|                   |         |         |
|-------------------|---------|---------|
| James Sills       | Present | Present |
| W. Bruce Hamilton | Present | Present |
| Victor E. Duvall  | Present | Present |
| W. M. Hall        | Present | Present |
| William Carney    | Present | Present |
| George Boeckman   | Present | Present |
| John W. Ratliff   | Present | Present |
| Ronald Weddle     | Present | Present |
| Bobby Brooks      | Present | Present |
| Richard Hamilton  | Present | Present |

#### FIFTH DISTRICT

|                          |         |         |
|--------------------------|---------|---------|
| William Steve            | Present | Present |
| Hugh P. Adkins           | Present | Present |
| Richard Allan            | Present | Present |
| David Bizot              | Present | Present |
| Harold Blevins           | Present | Present |
| Joseph R. Bowling        | Present | Present |
| Charles Brohm            | Present | Present |
| Glenn Bryant             | Present | Present |
| John Bunting             | Present | Present |
| William C. Buschmeyer    | Present | Present |
| Peter C. Campbell        | Present | Present |
| James Childers           | Present | Present |
| Ronald N. Collier (Alt.) | Present | Present |
| Eugene H. Conner         | Present | Present |
| Samuel L. Cooper         | Present | Present |
| Thomas C. Dedman         | Present | Present |
| Donne DeMunbrun          | Present | Present |
| F. Z. Ferris (Alt.)      | Present | Present |
| Paul A. Fleitz           | Present | Present |
| Michael B. Flynn         | Present | Present |
| Daniel Garcia            | Present | Present |
| Henry Garretson          | Present | Present |
| Laman A. Gray, Jr.       | Present | Present |
| Larry P. Griffen         | Present | Present |
| John J. Guarnaschelli    | Present | Present |
| Walter I. Hume, Jr.      | Present | Present |
| John G. Hubbard          | Present | Present |
| Arthur T. Hurst          | Present | Present |
| Larry Jeffries (Alt.)    | Present | Present |
| Jerome P. Lacy           | Present | Present |
| Theodore N. Lynch        | Present | Present |
| Edward N. Maxwell        | Present | Present |
| H. Burl Mack             | Present | Present |
| James P. Moss            | Present | Present |
| Robert L. Nold, Sr.      | Present | Present |
| Thomas M. Marshall       | Present | Present |
| C. Kenneth Peters        | Present | Present |
| Arthur J. McLaughlin     | Present | Present |
| Roy J. Meckler           | Present | Present |
| Richard S. Miles         | Present | Present |
| Lynn Ogden               | Present | Present |
| Carroll H. Robie         | Present | Present |
| David E. Townes          | Present | Present |
| Donald Varga             | Present | Present |
| Will W. Ward             | Present | Present |
| A. Franklin White        | Present | Present |
| Walter Zukof             | Present | Present |
| William Yancy            | Present | Present |



# SIXTH DISTRICT

|            |                            |         |         |
|------------|----------------------------|---------|---------|
| ADAIR      | James C. Salato            | Present | Present |
| ALLEN      | Earl P. Oliver             | Present | Present |
| BARREN     | Howard Edgin               | Present | Present |
|            | Jerry Gibbs                | Present | Present |
| BUTLER     | Richard T. C. Wan          | .....   | Present |
| CUMBERLAND | J. Schickel                | .....   | Present |
| EDMONSON   | Sydney E. Farmer           | .....   | .....   |
| LOGAN      | C. V. Dodson               | .....   | .....   |
| METCALFE   | Lawrence P. Emberton       | .....   | .....   |
| MONROE     | Kenneth R. Crabtree (Alt.) | Present | .....   |
|            | James Head (Alt.)          | .....   | Present |
| SIMPSON    | J. Michael Pulliam         | Present | Present |
| WARREN     | John Downing               | Present | Present |
|            | Nelson B. Rue              | Present | Present |

# SEVENTH DISTRICT

|          |                      |         |         |
|----------|----------------------|---------|---------|
| ANDERSON | Cecil Martin         | Present | Present |
| CARROLL  | Harry J. Cowherd     | Present | Present |
| FRANKLIN | David L. Douglas     | Present | Present |
|          | Willett H. Rush, Jr. | Present | Present |
| GALLATIN |                      |         |         |
| GRANT    | Robert L. Houston    | Present | Present |
| HENRY    | Robert G. Wellman    | Present | Present |
| OLDHAM   | Maurice Bowling      | .....   | .....   |
| OWEN     | Willis P. McKee      | Present | Present |
| SHELBY   | William K. Skaggs    | .....   | .....   |
| SPENCER  | Carl Cooper, Jr.     | Present | Present |
| TRIMBLE  |                      |         |         |

# EIGHTH DISTRICT

|                 |                             |         |         |
|-----------------|-----------------------------|---------|---------|
| BOONE           | William M. Waller (Alt.)    | Present | Present |
|                 | William R. Yates            | Present | Present |
| CAMPBELL-KENTON | Richard Allnutt (Alt.)      | .....   | Present |
|                 | Thomas L. Heavern (Alt.)    | Present | Present |
|                 | Howard Heringer, Jr. (Alt.) | Present | Present |
|                 | Paul H. Klingenberg         | .....   | .....   |
|                 | William B. Monnig           | Present | Present |
|                 | Robert E. Smith             | Present | Present |
|                 | Fred A. Stine               | Present | Present |
|                 | Jerry C. Sutcamp            | .....   | .....   |
|                 | Raymond J. Timmerman        | Present | .....   |

# NINTH DISTRICT

|           |                      |         |         |
|-----------|----------------------|---------|---------|
| BATH      | James M. Stevenson   | .....   | .....   |
| BOURBON   | Robert W. Fidler     | Present | Present |
| BRACKEN   | A. C. Wright         | .....   | .....   |
| FLEMING   | Joseph E. McKinney   | Present | Present |
| HARRISON  |                      |         |         |
| MASON     | Robert L. McKenney   | Present | Present |
| NICHOLAS  |                      |         |         |
| PENDLETON | Robert Kendall Brown | Present | Present |
| ROBERTSON |                      |         |         |
| SCOTT     |                      |         |         |

# TENTH DISTRICT

|           |                            |         |         |
|-----------|----------------------------|---------|---------|
| FAYETTE   | Peter P. Bosomworth        | Present | Present |
|           | Walter R. Brewer           | .....   | Present |
|           | P. Raphael Caffrey         | Present | Present |
|           | D. Kay Clawson             | Present | .....   |
|           | Colby N. Cowherd (Alt.)    | Present | .....   |
|           | Marcus L. Dillon, Jr.      | Present | Present |
|           | Glenn U. Dorroh            | Present | Present |
|           | Harold T. Foulconer        | Present | Present |
|           | John B. Floyd (Alt.)       | .....   | Present |
|           | Ward O. Griffen, Jr.       | Present | Present |
|           | Allen E. Grimes, Jr.       | Present | Present |
|           | Ronald D. Hamilton         | .....   | Present |
|           | Van R. Jenkins             | .....   | .....   |
|           | Walter D. Harris           | Present | Present |
|           | Richard Hench (Alt.)       | Present | .....   |
|           | Edgar M. McGee             | Present | Present |
|           | Franklin B. Meosnick       | Present | Present |
|           | Charles H. Nicholson       | Present | Present |
|           | Edwin J. Nighbert          | Present | Present |
|           | John D. Perrine            | Present | Present |
|           | Ellsworth C. Seeley (Alt.) | .....   | Present |
| JESSAMINE | John E. Trevey             | Present | Present |
| WOODFORD  | Phyllis J. Corbitt         | Present | .....   |
|           | Norman Fisher              | Present | Present |

# ELEVENTH DISTRICT

|            |                            |         |         |
|------------|----------------------------|---------|---------|
| CLARK      | Arnold L. Taulbee          | .....   | .....   |
| ESTILL     | Don E. Cloys               | Present | .....   |
| JACKSON    | Dwight L. Blackburn (Alt.) | Present | .....   |
| LEE        | Paula Maionchi             | .....   | Present |
| MADISON    |                            |         |         |
|            |                            |         |         |
| MENIFEE    | Harold Gillispie           | Present | Present |
| MONTGOMERY |                            |         |         |
| OWSLEY     |                            |         |         |
| POWELL     | Sam Cecil                  | .....   | .....   |
| WOLFE      | Paul F. Maddox             | .....   | .....   |

# TWELFTH DISTRICT

|            |                     |         |         |
|------------|---------------------|---------|---------|
| BOYLE      | Elmer H. Jackson    | .....   | Present |
|            | David C. Liebschutz | Present | Present |
| CASEY      | Lewis E. Wesley     | Present | Present |
| CLINTON    | Floyd B. Hay        | .....   | .....   |
| GARRARD    | Yash Pal Verma      | .....   | Present |
| LINCOLN    | Charles C. Crase    | .....   | Present |
| McCREARY   |                     |         |         |
| MERCER     | Bacon R. Moore, III | Present | Present |
| PULASKI    | J. Roy Biggs        | Present | Present |
|            | Danny M. Clark      | Present | Present |
| ROCKCASTLE | George W. Griffith  | .....   | .....   |
| RUSSELL    | Charles E. Peck     | .....   | .....   |
| WAYNE      | John W. Simmons     | .....   | .....   |

# THIRTEENTH DISTRICT

|          |                    |         |         |
|----------|--------------------|---------|---------|
| BOYD     | John S. Ashworth   | Present | Present |
|          | J. E. Moore        | .....   | .....   |
|          | Wiley Kozee        | Present | Present |
|          | William H. Matthew | Present | Present |
| CARTER   |                    |         |         |
| ELLIOTT  | Manuel S. Garcia   | Present | .....   |
| GREENUP  |                    |         |         |
| LAWRENCE |                    |         |         |
| LEWIS    | James G. Frederick | .....   | .....   |
| MORGAN   | David L. Harris    | Present | Present |
| ROWAN    | Ranjit Sinha       | Present | Present |

# FOURTEENTH DISTRICT

|           |                        |         |         |
|-----------|------------------------|---------|---------|
| BREATHITT | Emmanuel C. Turner     | .....   | .....   |
| FLOYD     | Larry M. Leslie        | Present | Present |
|           | W. Grady Stumbo (Alt.) | .....   | Present |
| JOHNSON   | Franklin Belhasen      | .....   | Present |
| KNOTT     | Denzil G. Barker       | .....   | .....   |
| LETCHER   | Vincent C. Arroz       | .....   | Present |
|           | Arthur J. Nash (A9lt.) | .....   | Present |
| MAGOFFIN  |                        |         |         |
| MARTIN    | Donnie R. Spencer      | .....   | .....   |
| PERRY     | Charles G. Nichols     | Present | Present |
| PIKE      | Terry L. Wright        | Present | Present |

# FIFTEENTH DISTRICT

|         |                       |         |         |
|---------|-----------------------|---------|---------|
| BELL    | Charles Moore         | Present | Present |
|         | Talmadge Hays         | Present | Present |
| CLAY    | William E. Becknell   | Present | Present |
| HARLAN  | Milo H. Schosser      | Present | Present |
|         | Paul M. Walstad       | Present | Present |
| KNOX    | Rofino F. Crisostomo  | Present | .....   |
|         | Ray Acosta (Alt.)     | .....   | Present |
| LAUREL  | William D. Pratt      | Present | Present |
| LESLIE  | W. B. Raymond Beasley | Present | Present |
| WHITLEY | R. D. Pitman          | Present | Present |
|         | Bill Briscoe          | .....   | Present |

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 24 and 26.



# PELHAM

Site of Bellarmine's 1979 Decorator's Showhouse, "Pelham" exemplifies the imagination and creativity of Louisville's finest decorators.

This imposing 5.1 acre estate affords a sweeping view of the Ohio River. An enclave accessible only by private bridge.

The residence was built in 1916 and contains 5500 square feet of usable living area including six bedrooms and five and a half baths. The exterior is fieldstone with a slate roof and

copper gutters. The grounds are magnificently landscaped with an additional 2.7 acres available for purchase.

Please write or call G. Breau Ballard III (502) 581-4366

**Price is \$300,000**



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TRUST COMPANY**

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P.O. Box 36010 • Louisville, Ky. 40232



The Upjohn Company  
announces  
a new  
indication for  
Motrin<sup>®</sup>  
(ibuprofen)



A well-tolerated, nonnarcotic prescription for pain

Motrin tablets  
400 mg  
Sig T q 4-6 h  
prn  
pain





# Motrin now proved an effective analgesic for mild to moderate pain

Motrin 400 mg provided greater relief of pain than did propoxyphene 65 mg in controlled clinical pain studies.

| Time after drug administration (hour)                   |                           | .5           | 1             | 2             | 3             | 4             |
|---|---------------------------|--------------|---------------|---------------|---------------|---------------|
| Mean relief-of-pain scores*<br>(No. patients reporting) | Motrin 400 mg ibuprofen   | .89<br>(108) | 1.25<br>(108) | 1.36<br>(108) | 1.28<br>(107) | 1.19<br>(106) |
|   | Darvon 65 mg propoxyphene | .66<br>(100) | .99<br>(99)   | 1.13<br>(96)  | .99<br>(96)   | .80<br>(96)   |
| Statistical significance                                |                           | p<0.02       | p<0.01        | p<0.05        | p<0.02        | p<0.002       |

\* 0 = No relief    1 = Partial relief    2 = Complete relief

Data on file at The Upjohn Company

Motrin demonstrated statistically significant greater relief of pain than did Darvon at all time intervals.

**Motrin** 400<sup>TABLETS</sup>mg  
ibuprofen, Upjohn

- Not a narcotic • Not addictive • Not habit forming
- Rapid analgesic action • Indicated in acute and chronic pain
- Well tolerated. The most common side effect with Motrin is mild gastrointestinal disturbance.

Please turn the page for a brief summary of prescribing information.

**Upjohn**

**Motrin®** (ibuprofen)

## now proved an effective analgesic for mild to moderate pain

**Motrin® Tablets** (ibuprofen, Upjohn)

**Indications and Usage:** Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

**Contraindications:** Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

**Warnings:** Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

**Precautions:** Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

**Drug interactions.** *Aspirin:* used concomitantly may decrease Motrin blood levels. *Coumarin:* Bleeding has been reported in patients taking Motrin and coumarin.

**Pregnancy and nursing mothers:** Motrin should not be taken during pregnancy or by nursing mothers.

### Adverse Reactions

#### *Incidence greater than 1%*

**Gastrointestinal:** The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea\*, epigastric pain\*, heartburn\*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness\*, headache, nervousness. **Dermatologic:** Rash\* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

\*Incidence 3% to 9%.

#### *Incidence less than 1 in 100*

**Gastrointestinal:** Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

#### *Causal relationship unknown*

**Gastrointestinal:** Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

**Overdosage:** In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

**Dosage and Administration:** Rheumatoid and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400 or 600 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

**Caution:** Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

**Upjohn**

THE UPJOHN COMPANY  
Kalamazoo, Michigan 49001 USA

MED B-4-S

**ALDORIL®**  
containing methyldopa and hydrochlorothiazide

#### **TABLETS**

### **ALDORIL® -25**

containing 250 mg ALDDMET® (Methyldopa, MSD)  
and 25 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

#### **TABLETS**

### **ALDORIL® -15**

containing 250 mg ALDDMET® (Methyldopa, MSD)  
and 15 mg HydroDIURIL® (Hydrochlorothiazide, MSD)

#### **TABLETS**

### **ALDORIL® D30**

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SHARP  
& DOHME  
J9AR13



## Health and Safety Tip From the American Medical Association

### MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.
2. Drinking to handle problems or relieve symptoms.
3. Obvious preoccupation with alcohol and the frequent need to have a drink.
4. Surreptitious drinking or gulping of drinks.
5. Tendency toward making alibis and weak excuses for drinking.
6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.
7. Frequent absenteeism from the job, especially following weekends and holidays.
8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.
9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.
10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.
11. Multiple contacts with the health care system with disorders that are alcohol caused or related.
12. Persistent marital and family problems, perhaps with multiple marriages.
13. History of arrests for drunkenness or drunken driving.

*Submitted by the KMA Committee on Physicians' Health*

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All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.

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### MEDICAL OPPORTUNITIES

F.P. TO ASSOCIATE WITH TWO FAMILY PRACTITIONERS. Rotate nights, weekends, holidays, liberal vacation. P.S.C. fringe benefit plan. Forty minutes from U. of L. Medical School. 250 bed acute-care hospital. No OB, no investment. Salary negotiable. Contact Service Bureau for Doctors, 2823 Preston Highway, Louisville, KY, Attention: Mr. Pat Hohman.

KENTUCKY EMERGENCY PHYSICIAN—Lovely community of 10,000 in western Kentucky near Paducah needs two physicians to share evening rotations in the emergency department. 10 to 15 patients per 12-hour shift. Income excellent for this volume. For additional details, contact Tom Cooper, M.D., 970 Executive Parkway, St. Louis, Missouri 63141, or call toll free 1-800-325-3982, ext. 225.

### FOR LEASE OR SALE

OPHTHALMOLOGIST RETIRING. Wants to sell building and practice. Excellent Real Estate Investment. In practice 31 years. 95% Collection Rate. Located Jacksonville, Florida, Gateway City to Florida, and, *it's largest!* Call (904) 398-0354 after 8:30 P.M.



## Headquarters Activity

### OCTOBER

- 9 *Journal* Editors, Louisville
- 20 Physician Recruitment Fair, Ramada Inn, Louisville

### NOVEMBER

- 8 Board of Licensure, Louisville
- 8 CME Committee, Louisville
- 13 *Journal* Editors, Louisville

### DECEMBER

- 11 *Journal* Editors, Louisville
- 12 Specialty Group Presidents, Louisville
- 12-13 Board of Trustees, Louisville

# Practice what we teach.

Today there are over 31 million men, women and children suffering from the many forms of arthritis and related rheumatic diseases. And there just aren't enough trained rheumatologists to help them.

That's why arthritis sufferers need your help.

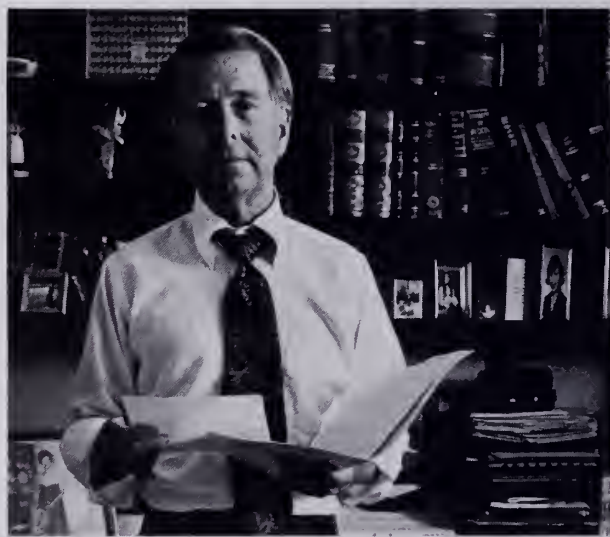
They must depend heavily on the family practitioner for better diagnosis, more effective patient treatment.

Contact your local Arthritis Foundation chapter for the latest information on arthritis. This includes continuing educational seminars by leading rheumatologists, scientific meetings, "outreach" programs — as well as the "Bulletin on the Rheumatic Diseases," "Arthritis and Rheumatism Journal," "Primer on the Rheumatic

Diseases," audio cassettes and other professional materials. Free disease handbooks and medication pamphlets are also available to patients.

Please. Let us help your practice with what we teach.

The Arthritis Foundation helps doctors help.





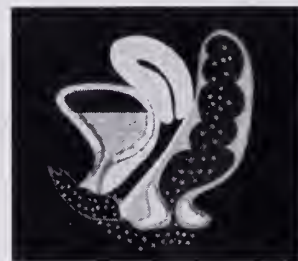
ROCHE

# For recurrent attacks of urinary tract infection in women

## Bactrim<sup>TM</sup> DS Double Strength Tablets

Each tablet contains 160 mg trimethoprim and 800 mg sulfamethoxazole.

### Just one tablet b.i.d. for 10 to 14 days



- Action at urinary/vaginal/lower bowel sites helps eliminate reservoirs of infecting organisms
- Distinctive antibacterial action plus wide spectrum helps eradicate recurrent UTI
- Low incidence of bacterial resistance in community practice

- Convenient *b.i.d.* dosage provides day-and-night antibacterial control
- Contraindicated during pregnancy and the nursing period. During therapy, maintain adequate fluid intake; perform CBC's and urinalyses with microscopic examination.

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications and Usage:** For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli*, *Klebsiella-Enterobacter*, *Proteus mirabilis*, *Proteus vulgaris*, *Proteus morganii*. It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. Note: The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

**Also for the treatment of documented *Pneumocystis carinii* pneumonitis.** To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

The recommended quantitative disc susceptibility method (*Federal Register*, 37:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

**Contraindications:** Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers; infants less than two months of age.

**Warnings:** Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

**Precautions:** Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

**Adverse Reactions:** All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. **Blood dyscrasias:** Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. **Allergic reactions:** Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. **Gastrointestinal reactions:** Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. **CNS reactions:** Headache,

peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. **Miscellaneous reactions:** Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

**Dosage: Not recommended for infants less than two months of age.**

**Urinary Tract Infections:** Usual adult dosage—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

Recommended dosage for children—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. A guide follows:

Children two months of age or older:

| Weight |     | Dose—every 12 hours |                          |
|--------|-----|---------------------|--------------------------|
| lbs    | kgs | Teaspoonfuls        | Tablets                  |
| 20     | 9   | 1 teasp. (5 ml)     | ½ tablet                 |
| 40     | 18  | 2 teasp. (10 ml)    | 1 tablet                 |
| 60     | 27  | 3 teasp. (15 ml)    | 1½ tablets               |
| 80     | 36  | 4 teasp. (20 ml)    | 2 tablets or 1 DS tablet |

For patients with renal impairment:

| Creatinine Clearance (ml/min) | Recommended Dosage Regimen |
|-------------------------------|----------------------------|
| Above 30                      | Usual standard regimen     |
| 15-30                         | ½ the usual regimen        |
| Below 15                      | Use not recommended        |

***Pneumocystis carinii* pneumonitis:** Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

**Supplied:** Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose<sup>®</sup> packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose<sup>®</sup> packages of 100; Prescription Paks of 40, available singly and in trays of 10. Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole, fruit-licorice flavored—bottles of 16 oz (1 pint).

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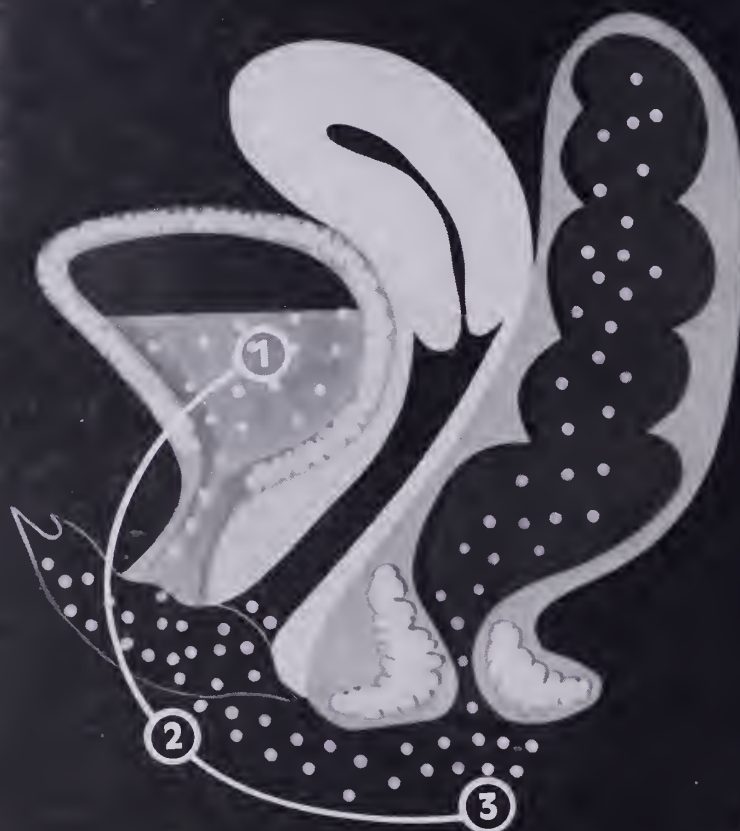
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**Please see back cover.**

Her next attack of cystitis may require

# the Bactrim<sup>TM</sup>

## 3-system counterattack



ROCHE

Bactrim has shown high clinical effectiveness in recurrent cystitis as a result of its wide spectrum and distinctive antimicrobial action in the urinary, vaginal and lower intestinal tracts.

The probability of recurrent urinary tract infection appears to be enhanced by the establishment of large numbers of *E. coli* or other urinary pathogens on the vaginal introitus. The trimethoprim component of

Bactrim diffuses into vaginal fluid in effective concentrations, thus combating migration of pathogens into the urethra.

Studies have shown that Bactrim acts against *Enterobacteriaceae* in the bowel without the emergence of resistant organisms. Thus, Bactrim reduces the risk of introital colonization by fecal uropathogens. It has *no* significant effect on other normal, necessary intestinal flora.

## Bactrim fights uropathogens in the urinary tract/vaginal tract/lower intestinal tract

Please see reverse side for summary of product information.



incl

Esophageal Carcinoma  
Bacterial Susceptibility to Antibiotics  
Antimicrobial Agents, Case 12:  
Fever and a Cutaneous Eruption

December 1979  
Volume 77  
Number 12

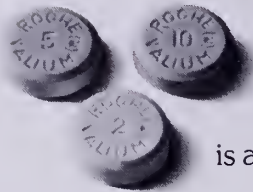
MDS

# The Journal Of The Kentucky Medical Association

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DEC 30 1979

# A character all its own.



Valium (diazepam/Roche) is a benzodiazepine with a character all its own.

Pharmacologically, it is a potent skeletal muscle relaxant and anticonvulsant (in adjunctive use), as well as an antianxiety agent. Pharmacokinetically, only Valium provides active *diazepam* as well as the active metabolites 3-hydroxydiazepam, desmethyldiazepam and oxazepam.

But the individual character of Valium is even more apparent clinically than pharmacokinetically. And far more significant. That's because of the patient response obtained with Valium. A response which brings a calmer frame of mind. A response which has a pronounced effect on the somatic symptoms of anxiety, particularly muscular tension. A response which helps the patient feel more like himself again because of the way Valium reduces the overwhelming symptoms of anxiety and psychic tension.

Another important aspect of the clinical character of Valium is safety. Though drowsiness, ataxia and fatigue are possible, these and more serious side effects are rarely a problem. Of course, as with all CNS-acting drugs, patients taking Valium should be cautioned against driving, operating dangerous machinery or the simultaneous ingestion of alcohol.

Unquestionably, many psychotherapeutic agents, including other benzodiazepines, have antianxiety effects. But one fact remains: you get a certain kind of patient response with Valium. It's a response you want. A response you know. A response you trust as part of your overall management of anxiety and psychic tension.

**Valium®**  
**diazepam/Roche**  
2-mg, 5-mg, 10-mg scored tablets  
a prudent choice in psychic  
tension and anxiety

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

**Usage in Pregnancy:** Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

**Dosage:** Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

**Supplied:** Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10.



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Division of Hoffmann-La Roche Inc.  
Nutley, New Jersey 07110

# The Journal Of The Kentucky Medical Association

USPS 280-700

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## MESSAGE FROM THE PRESIDENT

### THE POSITIVE APPROACH

**T**HE Physician Recruitment Fair was a tremendous success. The idea to aid critical and rural areas in attracting physicians to their communities was first germinated at the Kentucky Medical Association. Doctor John Baird and his committee spent long hours working out the arrangements and much to their credit, 35 communities responded.

Most of the community booths were remarkably well done and extolled the virtues of their areas quite well. We had 67 physicians or soon to be physicians in attendance, some coming from as far away as New York, New Jersey and Virginia. The committee is to be congratulated for their fine efforts to aide our Kentucky communities.

This legislative year, the Kentucky Medical Association will carry the initiative for a "brain death" law. This resulted from a Jefferson County Medical Society resolution that was passed by the House of Delegates during the annual meeting. This passage followed a generally excellent floor discussion. The spirit of concern and cooperation among the House members was outstanding. Although this is a complex problem that will require judicious legislation, it will ultimately benefit numerous patients who might receive organ transplants that otherwise would not have occurred. Again, our Kentucky communities will be served through this action.

These two important items demonstrate positive approaches by your Association through the actions of its members to better serve our patients. We can do such things as a collective body, and we should be proud of that fact. The Kentucky Medical Association included in The Federation of Medicine is as strong as its members; and with that resource, we have every reason to speak up at each opportunity and speak positively of our achievements.

ROBERT S. HOWELL, M.D.  
KMA President

May Your Holidays Be Happy And  
Our Prayers For Peace Be Answered



## POSTGRADUATE OPPORTUNITIES

### NOVEMBER

- 1 Diabetes Seminar,\*\* Stouffer's Louisville Inn
- 1-3 13th Annual Newborn Symposium,\*\* Health Sciences Center
- 2-3 "Exploited Children: Another Year of That?" (AASP)\*\* Galt House, Commonwealth Convention Center
- 5 Yandell Lecture, Health Sciences Center

### DECEMBER

- 7-8 Selected Topics in Nephrology and Urology,\*\* Stouffers
- 13 Management of Ischemic Heart Disease,\*\* Norton-Children's Hospital

### FEBRUARY 1980

- 15-16 Fiberoptic Bronchoscopy: Workshop, Session II\* Hyatt Regency, Lexington
- 24-29 11th Family Medicine Review, Session I\* Hyatt Regency, Lexington

### MARCH 1980

- 7-8 Causes and Prevention of Environmental Cancers, Hyatt Regency, Louisville

\*Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506 (606) 233-5161

\*\*For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202

### Cost Cut Corner

**DECEMBER**—Timely claims processing can improve cash flow.

Studies show that the average physician holds an insurance form approximately 37 days prior to submitting it. Consider the benefit of improving cash flow in your office by speedy processing of claims and statements.

A clear understanding of claims procedures will expedite processing and payment and will save you and your patients time, money and frustration. Is your staff familiar with claims submission procedures of third party payors you encounter in your practice?

### Brief Summary of Prescribing Information

**Indications and Usage:** Symptomatic relief of anxiety, tension, agitation, irritability and insomnia associated with anxiety neuroses and transient situational disturbances; anxiety associated with depressive symptoms and as a treatment of symptoms of anxiety if such symptoms are a significant feature of functional or organic disorders, particularly gastrointestinal or cardiovascular

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient

**Contraindications:** Known sensitivity to benzodiazepines or acute narrow-angle glaucoma

**Warnings:** Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients on lorazepam not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence. Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g., drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

**Precautions:** In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation

Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions

Observe usual precautions with impaired renal or hepatic function.

Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component

Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (approximately 6 times the maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatric patients requires caution and frequent monitoring for symptoms of upper GI disease

Safety and effectiveness in children under 12 years have not been established

**ESSENTIAL LABORATORY TESTS:** Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy

**CLINICALLY SIGNIFICANT DRUG INTERACTIONS:** Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

**CARCINOGENESIS AND MUTAGENESIS:** No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed

**PREGNANCY:** Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chloridiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug.

In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide

**NURSING MOTHERS:** It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk

**Adverse Reactions,** if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

**Overdosage:** In management of overdosage with any drug, bear in mind that multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring of vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levaterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined

**Ativan<sup>®</sup> IV**  
for (lorazepam)  
**Anxiety**

**Dosage:** Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.

**How Supplied:** 0.5, 1.0 and 2.0mg tablets.

**Wyeth Laboratories**  
Philadelphia, PA 19101

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# Why one benzodiazepine and not another?

Are you concerned about long-acting metabolites? Many clinicians, as well as pharmacologists, are beginning to draw attention to this problem (see New England Journal of Medicine, April 5, 1979).

In contrast to some older benzodiazepines, Ativan (lorazepam) does not give rise to long-lasting active metabolites. As with all benzodiazepines, you should follow the usual precautions concerning co-administration with other CNS depressants and warn your patients against operating dangerous machinery and motor vehicles.

However, it is noteworthy that Ativan showed no clinical evidence of accumulation even when given in high doses over periods up to 6 months. The half-life of free lorazepam is about 12 hours; steady-state serum levels are attained in 2-3 days. Comparable data for diazepam: 20-50 hours and at least 7-10 days. (The pharmacokinetic profile of a drug can define such characteristics as absorption, distribution, metabolism and elimination but cannot, at present, be directly related to its therapeutic effectiveness.)

Ativan has a convenient b.i.d. or t.i.d. dosage schedule; it is compatible with a long list of other medications and, of course, it is a highly effective anxiolytic agent, as established in numerous nationwide, double-blind, controlled evaluations in thousands of patients.



See important information on preceding page.

**Ativan<sup>®</sup>**  
**for** (lorazepam)  
**Anxiety**

# Deceased Kentucky Physicians

## 1979

A. L. Allen, Winchester

O. D. Maxey, Paducah

Harry J. Batts, Jr., Lexington

Adam Miller, Lexington

Edsel H. Burton, Faubush

Charles F. Moller, Lexington

Henry C. Cassini, Louisville

Reginald Claypool Neblett, Owensboro

Alvin Coxwell, DMD, Louisville

William F. Owsley, Burkesville

Theodore Roosevelt Davies, Barbourville

Thurman M. Perry, Jenkins

John William Ford, Inez

Elliott Podoll, Louisville

Elias Futrell, Cadiz

Sidney Robby, Louisville

Raul C. Gonzalez, Bedford, Indiana

Douglas Edmund Scott, Lexington

Airzzie Greene, Middletown

Frank A. Simon, Louisville

Byron Newton Harrison, Owensboro

Charles Dana Snyder, Hazard

Carl George Hoffman, Sun City, Arizona

William Seth Snyder, Jr., Frankfort

Meyer Stanley Jolson, Covington

John David Trawick, Jr., Louisville

Ronald L. Jones, New Albany, Indiana

James Farra Van Meter, Lexington

James Murray Kinsman, Louisville

George Hoy Widener, Jr., Paducah

Stuart H. Light, Ashland

James Sankey Williams, Nicholasville

U. M. Masmitja, Glasgow

Frederick William Wilt, Georgetown

*List of names of deceased physicians available to The Journal as of November 15, 1979.*



*There's a certain slant of light,  
Winter afternoons—that oppresses,  
Like the heft of cathedral tunes.*

*Heavenly hurt it gives us—  
We can find no scar,  
But internal difference,  
Where the meanings, are—*

*None may teach it—any—  
'Tis the seal despair  
An imperial infliction  
Sent us of the air—*

*When it comes, the landscape listens—  
Shadows hold their breath—  
When it goes, tis like the distance  
On the look of death—*

*Emily Dickinson  
Number 258*

## Auxiliary

# A Link in the Chain

*The Auxiliary to KMA is vitally interested in the future of medicine in this country and the betterment of medical education. Our joint efforts—as physicians and spouses—in the American Medical Association Education and Research Foundation program help to eliminate the financial barrier to medicine for all who are qualified and accepted by an approved training institution. This Loan Program for medical students, interns, and residents is the result of a cooperative effort by American medicine and private enterprise.*

*This Auxiliary page is a Christmas greeting from those who have contributed this year to our Sharing Card for AMA-ERF. This list does not include additional contributions received after November 22.*

Douglas R. Alvey, M.D.

Donald C. Barton, M.D.

Dr. & Mrs. Gordon Betts

Ralph L. Cash, Sr., M.D.

Donald Chatham, M.D.

Dr. & Mrs. Carl Cooper

Barbara Cox

Dr. & Mrs. Arthur T. Daus, Jr.

Dr. & Mrs. Edwin T. Davis

Dr. & Mrs. Larry C. Franks

Mrs. Veryl R. Frye, Jr.

Dr. & Mrs. Hoyt Gardner

Mrs. Tom E. Hall

Dr. & Mrs. Harold Haller

Floyd B. Hay, M.D.

Lee C. Hess, M.D.

Helen Kinsman

Dr. & Mrs. Wally O. Montgomery

Dr. & Mrs. Charles Nicholson

Dr. & Mrs. John D. Noonan

Earl P. Oliver, M.D.

Dr. & Mrs. Frank R. Pitzer

Emanuel H. Rader, M.D.

Betty Schrodtt

Dr. & Mrs. Allen Sklar

A. Bert Sparrow, M.D.

William T. Watkins, M.D.

Dr. & Mrs. William R. Yates

May Health and Happiness Be With You  
In The Coming Year

in therapy of skin and skin structure infections  
due to susceptible strains of staphylococci and/or streptococci...

# THE FIRST ORAL CEPHALOSPORIN THAT WORKS NIGHT AND DAY ON A SINGLE DOSE



## DURICEF<sup>®</sup>

(CEFADROXIL MONOHYDRATE)



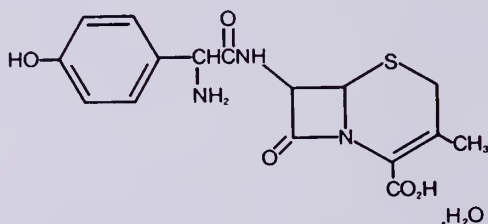
# DURICEF®

## (CEFADROXIL MONOHYDRATE)

### References:

1. Data on file, Mead Johnson Pharmaceutical Division.
2. Gatley MS: To be taken as directed. *J Ray Coll Gen Pract* 16:39, 1968.

**DESCRIPTION:** DURICEF® (cefadroxil monohydrate) is a semisynthetic cephalosporin antibiotic intended for oral administration. It is a white to yellowish-white crystalline powder. It is soluble in water and it is acid-stable. It is chemically designated as 7-[[D-2-amino-2-(4-hydroxyphenyl)acetyl]amino]-3-methyl-8-oxo-5-thia-1-azabicyclo [4.2.0]oct-2-ene-2-carboxylic acid monohydrate. It has the following structural formula:



**Clinical Pharmacology**—DURICEF (cefadroxil monohydrate) is rapidly absorbed after oral administration. Following single doses of 500 and 1000 mg., average peak serum concentrations were approximately 16 and 28 mcg./ml., respectively. Measurable levels were present 12 hours after administration. Over 90 percent of the drug is excreted unchanged in the urine within eight hours. Peak urine concentrations are approximately 1800 mcg./ml. during the period following a single 500 mg. oral dose. Increases in dosage generally produce a proportionate increase in DURICEF urinary concentration. The urine antibiotic concentration, following a 1 gm. dose, was maintained well above the MIC of susceptible urinary pathogens for 20 to 22 hours.

**MICROBIOLOGY:** *In vitro* tests demonstrate that the cephalosporins are bactericidal because of their inhibition of cell-wall synthesis. DURICEF is active against the following organisms *in vitro*:

*Beta-hemolytic streptococci*  
*Staphylococci*, including coagulase-positive, coagulase-negative, and penicillinase-producing strains  
*Streptococcus (Diplococcus) pneumoniae*  
*Escherichia coli*  
*Proteus mirabilis*  
*Klebsiella* species

**Note**—Most strains of *Enterococci* (*Streptococcus faecalis* and *S. faecium*) are resistant to DURICEF. It is not active against most strains of *enterobacter species*, *P.morganii*, and *P. vulgaris*. It has no activity against *Pseudomonas* or *Herella species*.

**Disc Susceptibility Tests**—Quantitative methods that require measurement of zone diameters give the most precise estimates of antibiotic susceptibility. One recommended procedure (CFR Section 460.1) uses cephalosporin class disc for testing susceptibility; interpretations correlate zone diameters of the disc test with MIC values for DURICEF. With this procedure, a report from the laboratory of "resistant" indicates that the infecting organism is not likely to respond to therapy. A report of "intermediate susceptibility" suggests that the organism would be susceptible if the infection is confined to the urinary tract, as DURICEF produces high antibiotic levels in the urine.

**INDICATIONS:** DURICEF (cefadroxil monohydrate) is indicated for the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Urinary tract infections caused by *E. coli*, *P. mirabilis*, and *Klebsiella* species  
 Skin and skin structure infections caused by staphylococci and/or streptococci

**Note**—Culture and susceptibility tests should be initiated prior to and during therapy. Renal function studies should be performed when indicated.

**CONTRAINDICATION:** DURICEF (cefadroxil monohydrate) is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

**WARNING: IN PENICILLIN-ALLERGIC PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE USED WITH GREAT CAUTION. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES OF PATIENTS WHO HAVE HAD REACTIONS TO BOTH DRUGS (INCLUDING FATAL ANAPHYLAXIS AFTER PARENTERAL USE.)**

Any patient who has demonstrated a history of some form of allergy, particularly to drugs, should receive antibiotics cautiously and then only when absolutely necessary. No exception should be made with regard to DURICEF (cefadroxil monohydrate).

**PRECAUTIONS:** Patients should be followed carefully so that any side or unusual manifestations of drug idiosyncrasy may be detected. If a hypersensitivity reaction occurs, the drug should be discontinued and the patient with the usual agents (e.g., epinephrine or other pressor amines, antihistamine or corticosteroids).

DURICEF (cefadroxil monohydrate) should be used with caution in the presence of markedly impaired renal function (creatinine clearance rate of less than 10 ml/min/1.73M<sup>2</sup>). (See Dosage and Administration.) In patients with known suspected renal impairment, careful clinical observation and appropriate laboratory studies should be made prior to and during therapy.

Prolonged use of DURICEF may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side of Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs may be due to the drug.

**USAGE IN PREGNANCY:** Although no teratogenic or anti-fertility effects have been seen in reproductive studies in mice and rats receiving dosages greater than normal human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

**ADVERSE REACTIONS:** Gastrointestinal—The most frequent side-effect is nausea. It was infrequently severe enough to warrant cessation of therapy. Constipation with food decreases nausea and does not decrease absorption. Headache and dysuria have also occurred.

**Hypersensitivity**—Allergies (in the form of rash, urticaria, and angioedema) have been observed. These reactions usually subsided upon discontinuation of the drug.

Other reactions have included genital pruritus, genital moniliasis, vaginitis, and moderate transient neutropenia.

**DOSAGE AND ADMINISTRATION:** DURICEF (cefadroxil monohydrate) is stable and may be administered orally without regard to meals. Administration with food may be helpful in diminishing potential gastrointestinal discomfort occasionally associated with oral cephalosporin therapy.

**Adults**—For urinary tract infections the usual adult dosage is one gm. (1000 mg. capsules) two times per day. For skin and skin structure infections the usual dose is 500 mg. two times per day or 1 gm. once a day.

In patients with renal impairment, the dosage of cefadroxil should be adjusted according to creatinine clearance rates to prevent drug accumulation. The following schedule is suggested. In adults, the initial dose is 1 gm. of DURICEF (cefadroxil monohydrate) and the maintenance dose (based on the creatinine clearance rate [ml/min/1.73M<sup>2</sup>]) is 500 mg. at the time intervals listed below.

| Creatinine Clearances | Dosage Interval |
|-----------------------|-----------------|
| 0-10 ml/min           | 36 hours        |
| 10-25 ml/min          | 24 hours        |
| 25-50 ml/min          | 12 hours        |

Patients with creatinine clearance rates over 50 ml/min may be treated as if they were patients having normal renal function.

**Children**—Dosage and safety have not yet been established in children.

**HOW SUPPLIED:** DURICEF® (cefadroxil monohydrate) capsules 500 mg. oral administration in an opaque maroon cap and opaque white body. No. 1 gelatin capsule. On each half capsule printed in black is "MJ" and "500." DURICEF is available in bottles of 24 capsules (NDC 0087-0784-41) and 100 capsules (NDC 0087-0784-42).

U.S. Patent Re. 29,164

**Mead Johnson**

PHARMACEUTICAL DIVISION  
 Mead Johnson & Company  
 Evansville, Indiana 47721

# Esophageal Carcinoma: Trends in Incidence, Treatment Methods and Prognosis

Kerry M. Fagelman, M.D., Rama Jager, M.D. and Hiram C. Polk, Jr., M.D., Louisville, Kentucky

The purpose of this study was to review our institutional experience in the treatment, to determine relative effectiveness of various treatment methods and to compare this data with results from other institutions. From 1956 to 1975, 220 patients with esophageal carcinoma were diagnosed at Louisville General Hospital. The tumor registry records were analyzed to determine trends in incidence, stage, and treatment. In addition, a select review of the reports from other institutions was done to provide a comparison for these local results. Unfortunately, cure remains rare and palliation incomplete.

## Introduction

Carcinoma of the esophagus continues to be one of the most malignant of gastrointestinal neoplasms. Fortunately the disease is uncommon, with a reported annual incidence of 10 per 100,000 in the United States and a male to female ratio of 3:1.<sup>1</sup> Despite advances in surgical and radiotherapeutic technique, few centers report significant improvement in survival figures. Until 1974 only 301 five year sur-

vivors had been reported in all the surgical literature.<sup>2</sup> The purpose of this paper is 1. to review our experience in treating esophageal carcinoma, 2. to determine the relative effectiveness of various treatment methods, and 3. to compare this data with results from other institutions.

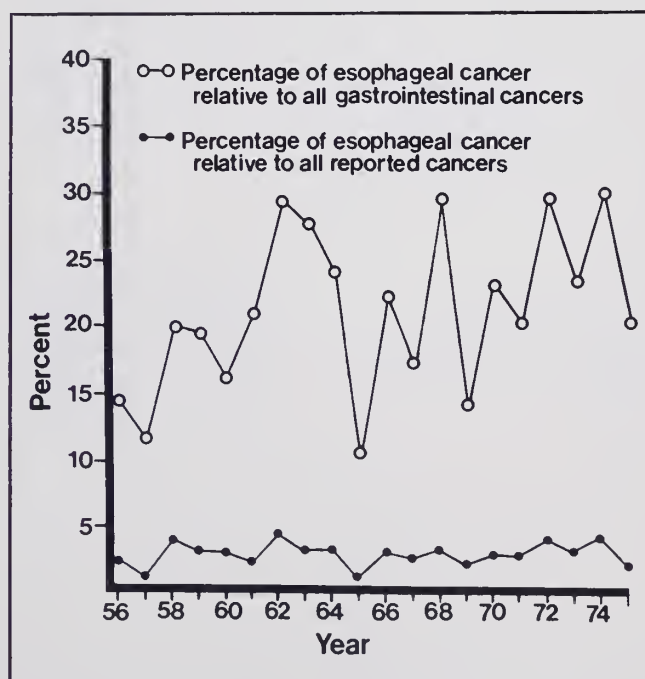


Fig. 1: The relative frequency of esophageal cancer at Louisville General Hospital.

from the Department of Surgery and the Cancer Center, University of Louisville School of Medicine, Louisville, Kentucky



# ESOPHAGEAL CARCINOMA — Fagelman, Jager and Polk

## Materials and Methods

Data were collected from the records of the Tumor Registry at Louisville General Hospital. A total of 220 patients were diagnosed as having carcinoma of the esophagus during the study period, 1956-1975. In 213 patients biopsy or cytology of the primary tumor was obtained and in seven patients radiographic evidence alone provided the diagnosis. The data were analyzed according to five year time periods and comparisons were made of the biographical data, stage of disease, treatment, and survival. In order to determine possible relationships, the survival time of all patients was compared to the stage of the disease and to the treatment modality employed.

## Results

**Relative Frequency** The relative annual incidence of esophageal cancer has remained constant, at 3% to 4% of all cancers reported. However, when compared to the total number of gastrointestinal cancers reported, esophageal neoplasms have increased from 17% during the first five-year period to 25% in the last five-year period (Figure 1).

**Age** The average age for all patients studied was 59 years. There has been a slight decrease in the age distribution from  $62 \pm 1.6$  (standard error of the mean) in 1956-60 to  $59 \pm 1.4$  in 1971-75 (Figure 2).

**Sex and Race** For the total period there was a 2.5:1 ratio of male to female distribution. No trend was disclosed in sex incidence (Figure 3). The ratio of non-white to white of the entire study period was 2.4:1, but there was a steady increase in esophageal cancer among the nonwhite population, a shift not reflective

of a changing patient population. Of all admissions in 1958 and 1973 the percentage of nonwhite patients was 49% and 54% respectively.

**Stage at time of diagnosis** The relative incidence of regional dissemination has dropped markedly from 69% in the first five-year period to 43% in the last five years of the study (Figure 4). Concurrently the incidence of local disease has increased from 12% to 29% during this period, but there has been an offsetting increase from 10% to 21% in the percentage of patients in whom the stage of disease was not determined.

**Treatments Offered** Palliative operation (gastrostomy, intubation, or bypass without resection) with or without radiation therapy as well as resection have not shown any consistent changes during the study period (Figure 5). The proportion of patients receiving radiation therapy as the sole form of treatment has declined from 44% to 23%. However, there has been an unexplained concurrent rise in the percentage of patients not receiving any treatment from 13% to 23%. The combined use of resection and radiation has shown a steady increase from 2% in the 1961-65 period to 10% in the 1971-75 period.

**Survival vs. Stage of Disease** The mean survival (in months) was analyzed according to the stage of the disease at time of diagnosis (Table 1). Until the last five-year period there was little correlation of these two factors. During the latest period, localized disease demonstrated the longest mean survival (6.3 months) and metastatic disease the shortest (1.3 months).

**Treatment of "Curable" Disease** Table 2 compares the

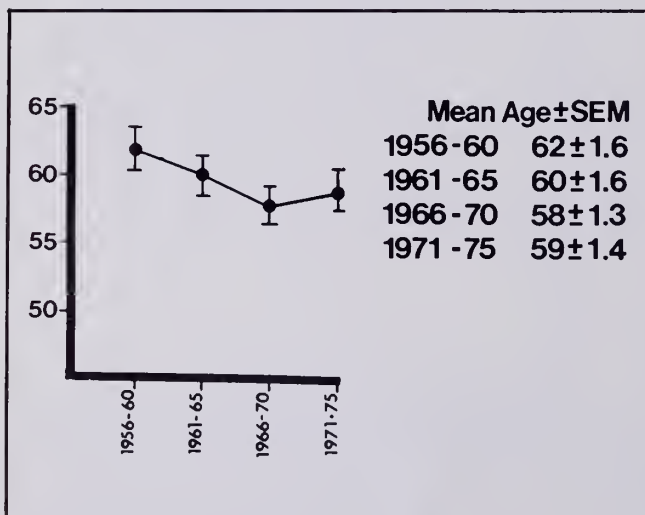


Fig. 2: The age distribution of patients with esophageal carcinoma.

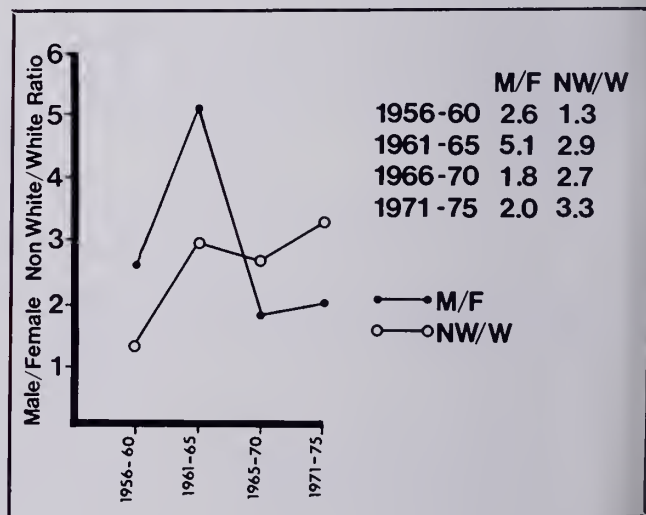


Fig. 3: The ratios of sex and race distributions during the study period.



# ESOPHAGEAL CARCINOMA — Fagelman, Jager and Polk

types of treatment offered to patients with localized disease, a stage at which the disease may be resectable and potentially curable. Only in the last decade has some consistency existed, with approximately one-third of patients being resected. The latest five-year period has been the only time when there were no patients in the no-treatment category.

**Survival vs. Treatment Modalities** The correlation between the mean crude survival and the type of treatment was also determined (Table 3). The limitations of this retrospective study of only 220 patients are exemplified in this analysis. The response to a particular mode of therapy is certainly, in part, determined by the extent of the disease process. Attempts to consider this parameter in analyzing survival and treatment result in multiple subgroups each with small numbers, amenable

to misleading comparisons. Evaluating survival simply according to mode of therapy introduces the variability of patient selection which inevitably affects outcome. Therefore, improved survival for a particular treatment during the study period would indicate not only that the therapy modality may have improved but also that the patient selection criteria now being employed are more effective. Similarly, longer survival resulting from one form of therapy compared to survival time resulting from another does not just imply inherently superior treatment but also more careful and discriminating patient selection. Radiation therapy has resulted in better survival of patients than other modalities and has shown improvement with time. This form of therapy has generally been offered to patients in all stages of the disease. The addition of a palliative surgical procedure to irradiation is associated with a shorter mean survival which may be indicative of a more extensive tumor

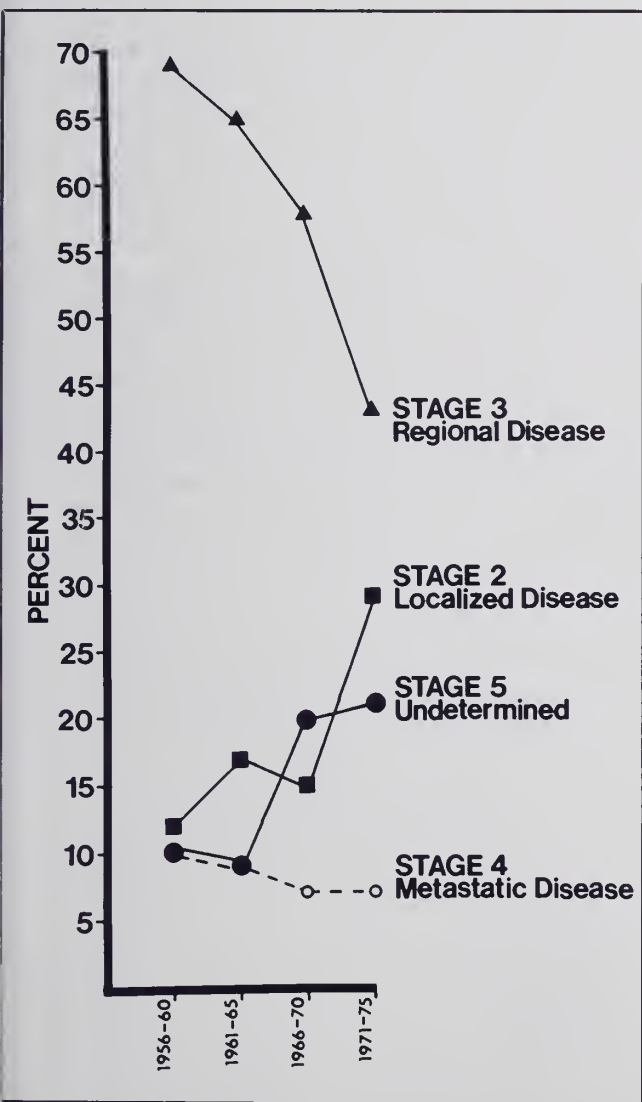


Fig. 4: The relative frequency of stages at time of diagnosis.

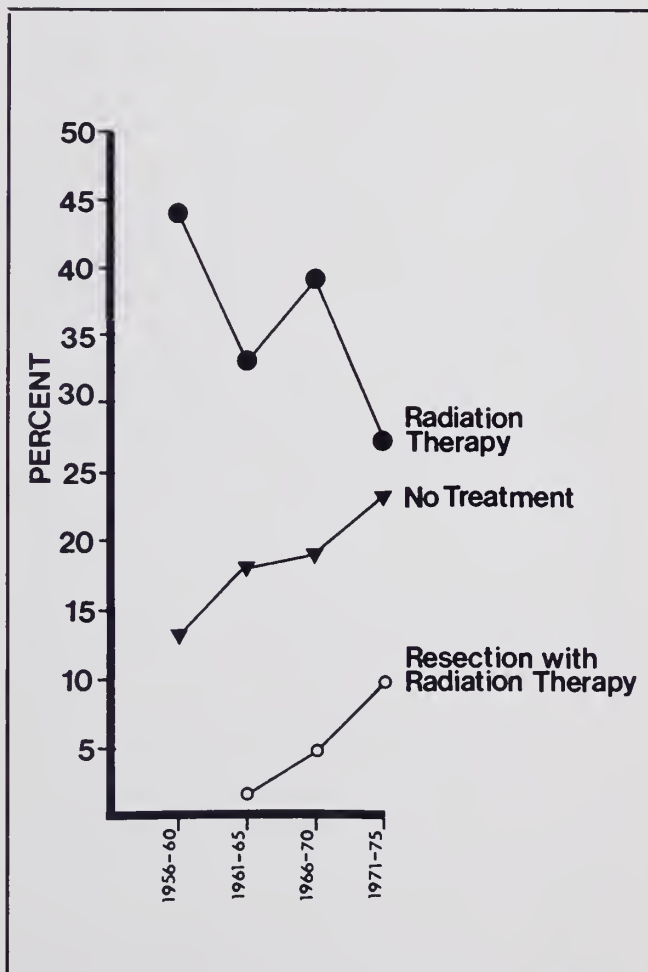


Fig. 5: The relative frequency of treatments offered. The frequency of palliative surgery with and without radiation, and surgical resection did not show definite trends during the study period and for clarity are therefore not depicted.

# ESOPHAGEAL CARCINOMA — Fagelman, Jager and Polk

causing more severe symptoms. Palliative surgery alone, as expected, has been only slightly better than no treatment at all. Only during the last five years has resection with radiation been offered to more than one patient. This modality, with the strictest patient selection criteria, resulted in the longest mean survival of 15.5 months, with a range from four months to 42 months.

**Extent of lesion** Attempts were made to analyze the size and local spread of tumor by reviewing pathology reports of resected and autopsy specimens. However, inconsistent reporting prevented meaningful correlations.

**Histologic Type** All patients with histologically proven cancer (96.8%) had squamous cell carcinoma.

## Discussion

Although dismal reports dominate the literature, some have achieved much better survival rates than others. The variation in incidence, sex, and racial distribution raises questions as to the heterogeneity of causal factors which in turn may account for the differences in biologic behavior of this tumor between different geographic locations. Japan has an incidence of 4.5 times greater than the United States among the male population.<sup>1</sup> The male to female ratio in this country is 3:1<sup>1</sup> whereas in Finland it is 1.2:1 and Johannesburg 26.5:1. The California tumor registry<sup>3</sup> yielded a male to female ratio of 2.8:1 which is similar to our observation of 2.5:1, with a higher incidence in the lower socioeconomic class. The mean age for patients diagnosed with this carcinoma in other reports<sup>3,4,5,6</sup> is similar to the 59 years determined herein.

Although exact causes remain obscure some risk factors have been identified in occurrence of esophageal carcinoma. Smoking increased the risk two- to six-fold.<sup>7</sup> Alcohol consumption alone is not a risk factor but when combined with smoking becomes synergistic. Although we have shown the frequency of esophageal neoplasms to have remained constant in relation to all other cancers during the study period, the increase in the relative incidence to other gastrointestinal carcinomas

might be related to the increase in these etiologic factors.

The diagnosis of esophageal carcinoma is not difficult to make when it is suspected. The most common initial symptom is dysphagia, but this is true of any functional esophageal disorder. Only when complete obstruction, regional spread to other organs or metastasis occur does the disease become obvious. The radiographic diagnosis is not absolute,<sup>8</sup> but cytology and/or biopsy can yield virtually 100% correct diagnosis.<sup>9</sup> The California Registry study<sup>3</sup> concurred with our findings of an increasing percentage of patients found with localized versus regional disease at the time of diagnosis possibly representing increasing diagnostic awareness.

Certainly an accurate determination of the stage of disease is necessary to offer the best treatment protocol to each individual patient. In patients who do not show obvious regional or metastatic spread, laparotomy for biopsy of the liver and celiac axis lymph nodes along with bronchoscopy, esophagoscopy and bilateral scalene node biopsies have been recommended by several authors.<sup>10,11,12</sup> Metastasis to subdiaphragmatic areas will occur with 50% of lower third lesions and 30% of middle third lesions.<sup>12</sup>

The American Joint Committee for Cancer Staging has developed a proven and accurate staging system based on the TNM Classification which is available for those especially interested in the problem.<sup>13</sup> The anatomical location of the tumor also determines the responsiveness to therapy and the following subgroups should be recorded: 1. cervical esophagus located from the pharyngo-esophageal junction to the thoracic inlet, 2. upper and mid thoracic esophagus located from the thoracic inlet to 10 cm above the gastroesophageal junction, and 3. the lower thoracic esophagus which comprises the lower 10 cm. In an analysis of 1000 cases of esophageal cancer a good correlation of stage with ultimate survival was demonstrated.<sup>13</sup> The irregular application of variable staging systems may underlie

TABLE 1  
MEAN SURVIVAL ACCORDING TO STAGE

|                    | 1956-60    | 1961-65   | 1966-70   | 1971-75    |
|--------------------|------------|-----------|-----------|------------|
| Local disease      | 6.8 ± 4.6  | 2.6 ± .8* | 5.0 ± 1.7 | 6.3 ± 1.4  |
| Regional disease   | 5.4 ± .9** | 4.5 ± .6  | 4.5 ± .8  | 4.0 ± .8   |
| Metastatic disease | 2.8 ± .8   | 2.6 ± .7  | 7.0 ± 3.2 | 1.3 ± .3   |
| Undetermined       | 5.3 ± .8   | 8.6 ± 2.2 | 8.4 ± 2.4 | 12.8 ± 4.4 |

All results are in months ± S.E.M.

\*1 patient excluded having survived 10 years 1 month

\*\*1 patient excluded having survived 6 years

TABLE 2  
TREATMENT MODALITIES UTILIZED  
IN PATIENTS WITH LOCALIZED DISEASE

|   | 1956-60 | 1961-65 | 1966-70 | 1971-75 |
|---|---------|---------|---------|---------|
| No treatment                              | 20%     | 22%     | 22%     | —       |
| Radiation therapy                         | 20%     | 11%     | 22%     | 24%     |
| Palliative surgery                        | 20%     | 44%     | —       | 18%     |
| Radiation therapy with palliative surgery | —       | 11%     | 22%     | 29%     |
| Resection                                 | 40%     | 11%     | 33%     | 12%     |
| Resection with radiation therapy          | —       | —       | —       | 18%     |
| Total number of patients: 40              |         |         |         |         |



# ESOPHAGEAL CARCINOMA — Fagelman, Jager and Polk

the poor correlation between the stage of the disease and survival found in this study.

The size of the lesion is an important determinant in staging. In patients with tumors < 5 cm, 50% show nodal metastasis; with tumors larger than 5 cm, metastases were found in 90% of the patients.<sup>1</sup> Goodner related survival to the size of the lesion; 91% were dead in the first year with lesions larger than 8 cm, 79% with tumors 5-8 cm in size and 33% with less than 5 cm neoplasms.<sup>14</sup>

The California Registry study demonstrated a significant rise in the use of radiation therapy as primary treatment from 1942-54 versus 1955-69.<sup>3</sup> Our study has shown a decline in the use of this modality as the sole form of therapy. Of note is the fact that the percentage of untreated patients has increased from 13% to 23% during the 20 years; it is our impression that this has been associated with an increased interest in the illness and an awareness of the virulence of its most advanced forms. Note that in the same period, every potentially available patient was treated.

Little advancement has been achieved in producing longer survival for patients with esophageal neoplasms at our institution. Radiation alone proved to be the most consistent treatment modality with mean survival better than most others. In addition, the mean survival for irradiated patients has increased from 5.5 months in 1956-60 to 9.1 months in 1971-75. The combined use of palliative surgery with radiation resulted in a shorter mean survival and has not demonstrated improvement during the study period. Untreated patients died within a few months after the diagnosis and palliative surgery extended the mean survival by only about one month. Resection alone has not produced consistent results, but the combined use of resection with radiation has resulted in a mean survival of 15.5 months during the last five year period. Although this can be explained by

various patient selection factors, it would indicate that the course of the disease could be significantly altered in a select group of patients by this specific modality. Table 3 shows the results of treatment for localized disease during the study period. Although 30% were resected, in 1971-75, 53% received radiation without resection, and 18% were treated with palliation alone. This would indicate either poor selection of treatment or a tendency toward less aggressive therapy.

Radiation therapy seems to produce better results the higher the anatomical location of the lesion.<sup>15</sup> However, because residual tumor often persists in resected specimens, radiation should not be considered to be curative.<sup>6</sup>

Debate exists as to what constitutes a good palliation of this disease. Hankins states that irradiation does not always restore the lumen and relieve dysphagia.<sup>4</sup> However, Pearson reports 23 of 26 five year survivors with normal swallowing mechanisms with this form of therapy.<sup>16</sup> Hollenbeck recommends surgery as the best palliative therapy, which however bears a 6% to 22% mortality rate in the best hands.<sup>5</sup>

Nakayama et al. has evaluated animal models to determine the best form of treatment.<sup>11</sup> Preoperative irradiation with resection produced the best results. This type of radiation is designed to shrink the tumor and decrease the frequency of lymph node metastasis and hematogenous spread upon surgical manipulation. A comparison of concentrated irradiation with fractional irradiation by reviewing resected specimens revealed that concentrated irradiation is superior to fractional irradiation providing more pronounced tumor damage without increasing the operative complications. Most other series have used preoperative irradiation of around 4500 rads in 18 fractions.<sup>6,14</sup> Nakayama recommended 2000-2300 rads in four to five days and operated within one week to avoid the tissue damage from irradiation complicating postoperative wound healing. Preoperative irradiation has been demonstrated to increase resectability with resectability rates reported from 17% to 53%.

The best results of survivors in the reported series come from Nakayama<sup>2,11</sup> and Pearson.<sup>15,16</sup> However, much controversy exists due to the inability to duplicate their results. Obviously, careful selection of patients in consideration of therapy is necessary to provide the best survival and palliation for each individual with esophageal carcinoma. In our series preoperative irradiation with resection seems to be the best treatment for localized disease in younger patients able to undergo the operation with little mortality and morbidity. Radia-

TABLE 3  
MEAN SURVIVAL ACCORDING TO TREATMENT MODALITY

|   | 1956-60    | 1961-65   | 1966-70   | 1971-75    |
|---|------------|-----------|-----------|------------|
| No treatment                              | 1.2 ± .2   | 2.0 ± .5  | 1.3 ± .2  | 2.3 ± .9   |
| Radiation therapy                         | 5.5 ± .6   | 6.1 ± 1.2 | 8.1 ± 1.5 | 9.1 ± 2.5  |
| Palliative surgery                        | 1.6 ± .2   | 3.4 ± .7  | 1.8 ± .4  | 3.9 ± .9   |
| Radiation therapy with palliative surgery | 6.8 ± 3.7* | 4.9 ± 1.4 | 5.6 ± 1.2 | 4.9 ± .5   |
| Resection                                 | 8.4 ± 3.1  | 4.0**     | 6.0 ± 3.4 | 1.0        |
| Resection with radiation therapy          | —          | 11.0      | 10.0      | 15.5 ± 6.1 |

All results in months ± SEM

\*1 patient excluded having survived 6 years

\*\*1 patient excluded having survived 10 years 1 month



# ESOPHAGEAL CARCINOMA — Fagelman, Jager and Polk

tion therapy appears to be the next choice for remaining patients.

The role of chemotherapy has not been adequately determined in this disease.<sup>10</sup> Current modes of therapy have certainly not been curative ones for this disease. There is the usual evidence that immunologic manipulation might be beneficial.<sup>17</sup>

The cause, biologic behavior, diagnosis and treatment of esophageal cancer has not yet yielded to study—at least not to the point of significant increases in human survival. Our analyses of institutional experience over a twenty-year period has clarified some trends and left others as obscure as ever. A further report upon the seemingly significant impact of combined radiotherapy and resection should follow—in another decade.

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# Regional Differences in Bacterial Susceptibility to Antibiotics

Samuel A. Smith, M.D. and George D. Kellerman, Ph.D., Louisville, Kentucky

This article is a comparison of the antibiotic sensitivity patterns of a smaller, relatively new community hospital serving a small city and rural population versus a larger older university hospital serving a predominantly urban population. Important differences in bacterial sensitivity exist. Physician awareness of local susceptibility trends should allow for more efficacious use of antibiotics.

manufacturers are introducing more and more antibiotics which have a new and sometimes improved spectrum of bacterial susceptibility as compared with the presently marketed antibiotics. Many of the newer drugs have a specific coverage for specific circumstances and are more costly than the presently available drugs. Thus, by having local statistical data on trends of bacterial susceptibility, the physician will be able to prescribe more efficaciously and possibly preserve some of the potent wonder drugs for specific circumstances as well as providing potential financial savings to the patient.

We have compared antibiotic susceptibility trends in two localities of medical practice in the state of Kentucky. One is the Louisville General Hospital, a 385 bed, university staffed hospital serving primarily Jefferson County, Kentucky, although referral cases are received from elsewhere in the state and from southern Indiana. The hospital has the busiest emergency room service in the state and serves as a major trauma receiving center. A large obstetrical and gynecological service, nursery and neonatal intensive care unit are present as well. The other locality is Greenview Hospital, Bowling Green, Kentucky, with 157 beds and an affiliate of Hospital Corporation of America. The hospital provides general medical and surgical services. There is no obstetrical service or emergency room per se. Patient care is provided by 70 generalists and specialists.

The chart represents a comparison of common, frequently isolated organisms and sensitivities from the laboratories of the two hospitals. The period of time covered is from July 1, 1978, to December 31, 1978. Organism identification was carried out by conventional selective and differential medias with appropriate biochemical testing. Antibiotic susceptibility testing was performed using the Kirby-Bauer method. Review of the chart indicates that gram negative organisms

ANTIBIOTIC therapy is extremely common in this country. The proper combination of drugs and bugs is heavily emphasized in medical school curricula, residency training programs, continuing medical educational courses, journal articles, and in drug brochures and advertisements. Antibiotic susceptibility testing and subsequent data analysis help to point to the development of bacterial resistance and allow institution of various therapeutic maneuvers to circumvent adverse situations. Most large scale reports of trends of bacterial susceptibility come from the larger academically affiliated institutions. Data from these studies are disseminated and are heavily relied upon by the practicing physician. We believe that large scale studies of antibiotic susceptibility testing are of great importance in the awareness of bacterial activity. However, we believe that the physician should also be aware of patterns in his specific geographical region of practice, as local trends may specifically alter the manner of his prescribing habits. In addition, drug

*From the Departments of Pathology, Greenview Hospital, Bowling Green, Ky. and the University of Louisville School of Medicine and Louisville General Hospital Microbiology Laboratory*

# BACTERICAL SUSCEPTIBILITY — Smith, Kellerman

ANTIBIOTIC SUSCEPTIBILITY COMPARISON  
GREENVIEW HOSPITAL VS. LOUISVILLE GENERAL HOSPITAL  
JULY-DECEMBER, 1978  
(% SENSITIVE)

|                        | GV<br>L.G.H. | AMPICILLIN | CARBENICILLIN | PENICILLIN | METHICILLIN | CEPHALOTHIN | GENTAMICIN | TOBRAMYCIN | CHLORAMPHENICOL | TETRACYCLINE | ERYTHROMYCIN | NALADIXIC ACID | NITROFURANTOIN | TMP-SMZ   | SULFONAMIDE |
|------------------------|--------------|------------|---------------|------------|-------------|-------------|------------|------------|-----------------|--------------|--------------|----------------|----------------|-----------|-------------|
| ESCHERICHIA COLI       | 119<br>575   | 88<br>71   | 80<br>76      | 0<br>—     | 0<br>—      | 84<br>84    | 99<br>96   | 97<br>96   | 97<br>93        | 80<br>76     | 0<br>—       | 95<br>99       | 95<br>98       | 97<br>100 | 81<br>76    |
| KLEBSIELLA PNEUMONIAE  | 40<br>278    | 3<br>5     | 5<br>10       | 0<br>—     | 0<br>—      | 100<br>79   | 100<br>83  | 98<br>86   | 95<br>86        | 78<br>79     | 3<br>—       | 93<br>97       | 85<br>95       | 95<br>100 | 90<br>75    |
| PROTEUS MIRABILIS      | 64<br>267    | 97<br>87   | 100<br>94     | 9<br>—     | 0<br>—      | 97<br>95    | 100<br>98  | 98<br>97   | 84<br>93        | 3<br>3       | 0<br>—       | 92<br>95       | 30<br>18       | 77<br>95  | —<br>93     |
| HEMOPHILUS INFLUENZAE* | 37<br>64     | 95<br>85   | 95<br>89      | 89<br>—    | 76<br>—     | 100<br>92   | 95<br>98   | 95<br>98   | 100<br>—        | 100<br>98    | 100<br>—     | —<br>—         | —<br>—         | 70<br>—   | —<br>—      |
| PSEUDOMONAS AERUGINOSA | 57<br>33     | 0<br>6     | 86<br>97      | 0<br>—     | 0<br>—      | 0<br>6      | 96<br>84   | 96<br>96   | 9<br>4          | 18<br>3      | 4<br>—       | 0<br>—         | 0<br>—         | 18<br>—   | 44<br>—     |
| STAPHYLOCOCCUS AUREUS  | 78<br>273    | 13<br>14   | 38<br>—       | 14<br>13   | 97<br>98    | 100<br>98   | 99<br>—    | 95<br>—    | 100<br>—        | 88<br>89     | 95<br>91     | —<br>—         | —<br>—         | —<br>—    | —<br>—      |

PENICILLINS AND  
CEPHALOSPORINS

AMINO-  
GLYCOSIDES

BACTERIO-  
STATIC

URINE

\* DATA FROM L.G.H. COVERS PERIOD OF TIMES FROM 1-1-78 to 6-30-78

isolated at Louisville General Hospital are more resistant to antibiotics: *Escherichia Coli* shows a 17% decrease to ampicillin and a 4% decrease to carbenicillin; *Klebsiella pneumoniae* shows a 21% decrease to gentamicin; *Proteus mirabilis* has decreased sensitivity to both ampicillin and carbenicillin but an increased sensitivity to chloramphenicol and trimethoprim-sulfamethoxazole combination; *Hemophilus influenzae* is 8% and 10% less sensitive to cephalothin and ampicillin respectively. *Pseudomonas aeruginosa* is more sensitive to carbenicillin and less sensitive to gentamicin at the Louisville General Hospital. *Staphylococcus aureus* has about the same sensitivity pattern at both institutions.

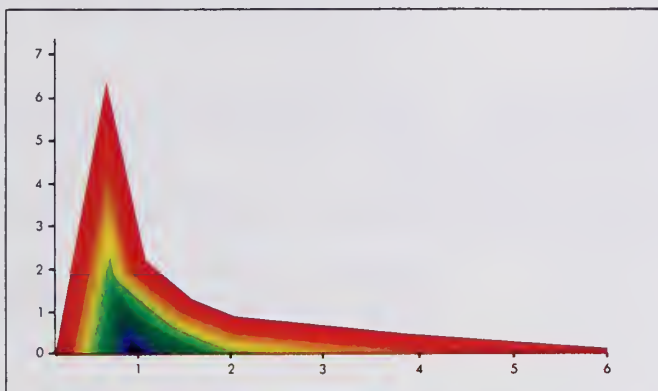
As the data presented indicate, there are regional differences in bacterial antibiotic susceptibility. These differences are probably the result of a combination of geography and hospital environment. Awareness of local conditions provides for the most intelligent initial use of antibiotics. Final treatment, of course, requires review of culture and sensitivity reports. We suggest that hospital laboratories periodically review culture and sensitivity data and make available their findings to the medical staff.

## ACKNOWLEDGEMENT

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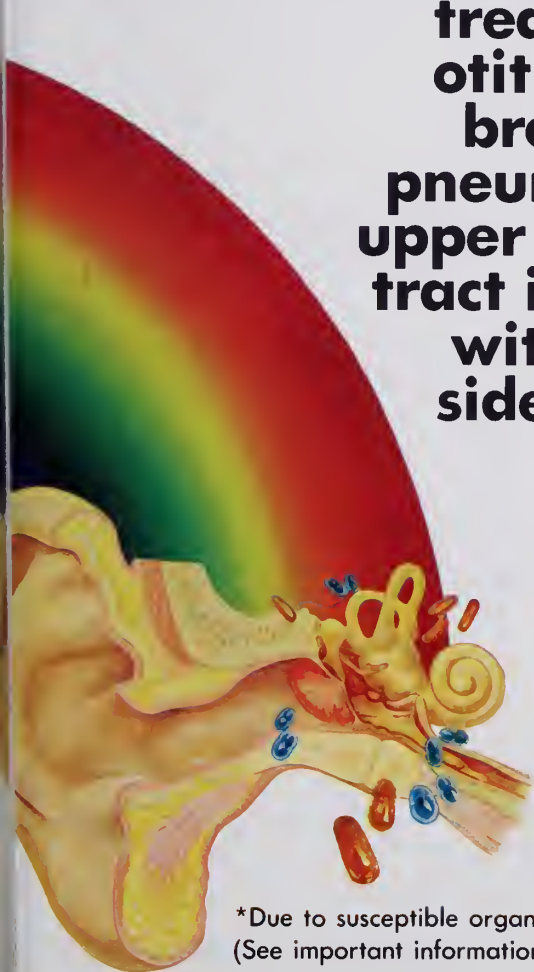


more  
than just spectrum

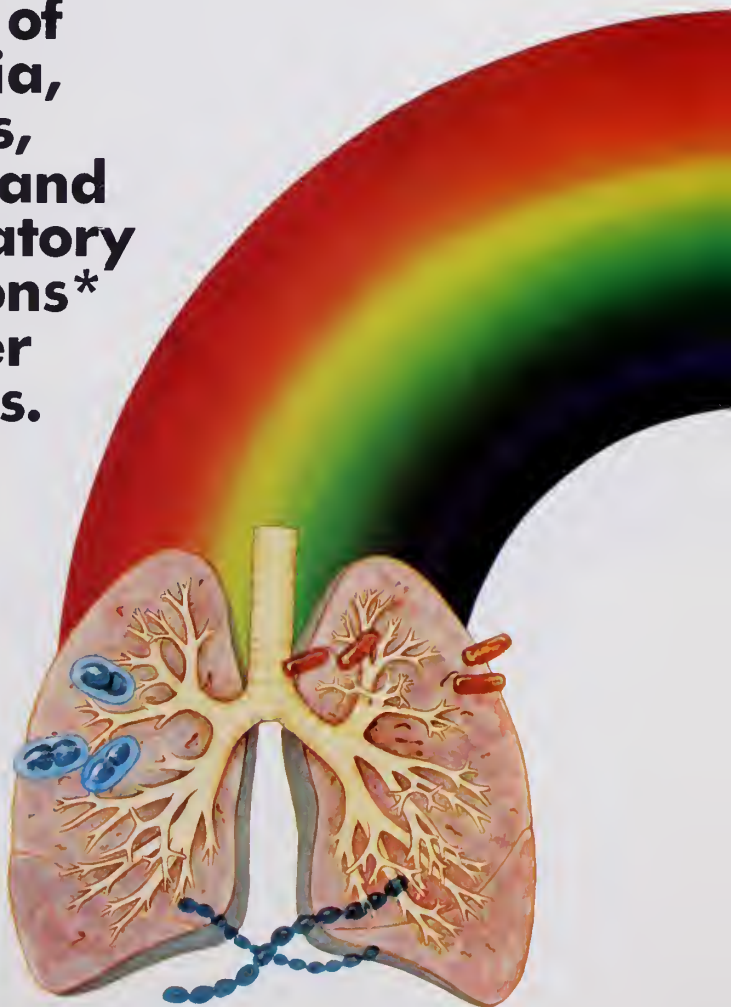


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\*Due to susceptible organisms  
(See important information on last page.)



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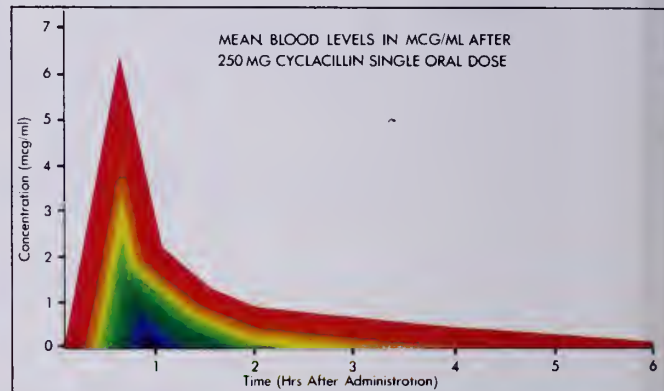
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Clinical efficacy of CYCLAPEN<sup>®</sup> in otitis media<sup>†</sup>

| Causative Organism   |                         | No. of Patients |
|----------------------|-------------------------|-----------------|
| <i>S. pneumoniae</i> | % Clinical Response     | 96              |
|                      | % Bacterial Eradication | 95              |
| <i>H. influenzae</i> | % Clinical Response     | 88              |
|                      | % Bacterial Eradication | 85              |

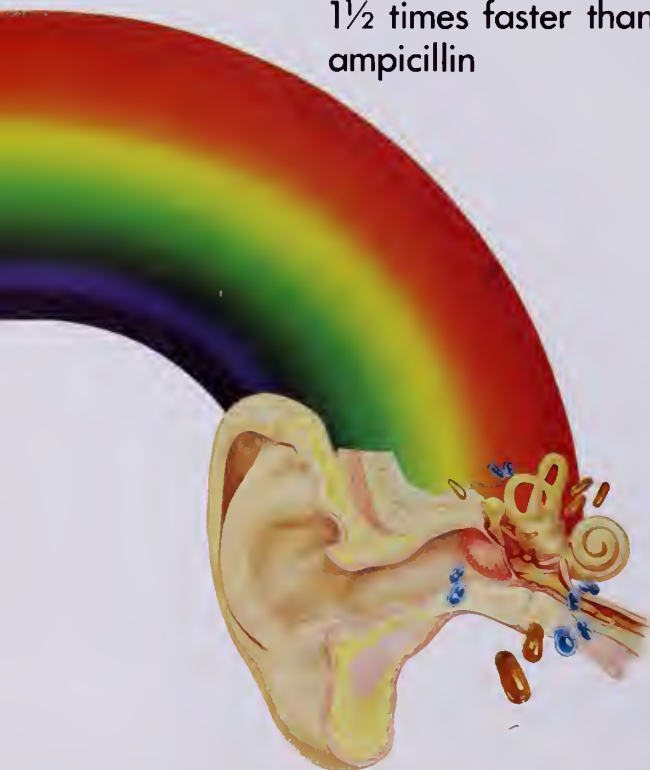
% Clinical Response  
 % Bacterial Eradication

**more than just spectrum  
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over side effects with CYCLAPEN® in  
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| Total number of drug-related side effects in all patients |                                |
|---|--------------------------------|
| CYCLAPEN®   | 128 of 1,286 (10%) of patients |
| ampicillin  | 202 of 1,129 (18%) of patients |
| Difference statistically significant ( $P < 0.001$ )      |                                |

CYCLAPEN® (cyclacillin)  
effective for otitis media<sup>†</sup> in children  
Excellent clinical results in eliminating the  
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|------------|-------------|------------|
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Cold JA, Hegarty CP, Deitch MW, Walker BR:  
Double-blind clinical trials of oral cyclacillin  
and ampicillin. *Antimicrob Ag Chemother*  
1979; 23:55-58, (Jan.) 1979.

† Data on file, Wyeth Laboratories.

See important information on next page.)



## In bronchitis, pneumonia and upper respiratory tract infections<sup>†</sup>

| High cure rate with CYCLAPEN®   |   |                 |
|---|---|-----------------|
| Causative Organism  | Bronchitis/Pneumonia†   | No. of Patients |
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|   | 95  |                 |
| Chronic Bronchitis† (acute exacerbation)  |   |                 |
| <i>H. influenzae</i>  | 92  | 12              |
|   | Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to <i>H. influenzae</i> |                 |
| Streptococcal Sore Throat†  |   |                 |
| Group A beta-hemolytic Streptococcus  | 100   | 44              |
|   | 86  |                 |
| <div><div><div></div><div>% Clinical Response</div></div><div><div></div><div>% Bacterial Eradication</div></div></div> |   |                 |

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Cyclapen<sup>®</sup> is indicated for the treatment of the following infections:

#### RESPIRATORY TRACT

Tonsillitis and pharyngitis caused by Group A beta-hemolytic streptococci. Bronchitis and pneumonia caused by *S. pneumoniae* (formerly *O. pneumoniae*).

Otitis Media caused by *S. pneumoniae* (formerly *D. pneumoniae*) and *H. influenzae*.

Acute exacerbation of chronic bronchitis caused by *H. influenzae*.\*

\*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, non-penicillinase producers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis* (This drug should not be used in any infections caused by *E. coli* and *P. mirabilis* other than urinary tract infections.)

NOTE: Cultures and susceptibility tests should be performed initially and during treatment to monitor the effectiveness of therapy and the susceptibility of bacteria. Therapy may be instituted prior to the results of sensitivity testing.

#### Contraindications

The use of this drug is contraindicated in individuals with a history of an allergic reaction to penicillins.

#### Warnings

CYCLACILLIN SHOULD ONLY BE PRESCRIBED FOR THE INDICATIONS LISTED IN THIS INSERT.

CYCLACILLIN HAS LESS *IN VITRO* ACTIVITY THAN OTHER DRUGS OF THE AMPICILLIN CLASS ANTIBIOTICS. HOWEVER, CLINICAL TRIALS HAVE DEMONSTRATED THAT IT IS EFFICACIOUS FOR THE RECOMMENDED INDICATIONS. SERIOUS AND OCCASIONAL FATAL HYPERSENSITIVITY (ANAPHYLACTOID) REACTIONS HAVE BEEN REPORTED IN PATIENTS RECEIVING PENICILLIN.

ALTHOUGH ANAPHYLAXIS IS MORE FREQUENT FOLLOWING PARENTERAL ADMINISTRATION, IT HAS OCCURRED IN PATIENTS ON ORAL PENICILLINS. THESE REACTIONS ARE MORE APT TO OCCUR IN INDIVIDUALS WITH A HISTORY OF SENSITIVITY TO MULTIPLE ALLERGENS. THERE ARE REPORTS OF PATIENTS WITH A HISTORY OF PENICILLIN HYPERSENSITIVITY REACTIONS WHO EXPERIENCED SEVERE HYPERSENSITIVITY REACTIONS WHEN TREATED WITH A CEPHALOSPORIN BEFORE THERAPY WITH A PENICILLIN. CAREFUL INQUIRY SHOULD BE MADE ABOUT PREVIOUS HYPERSENSITIVITY REACTIONS TO PENICILLINS, CEPHALOSPORINS, AND OTHER ALLERGENS. IF AN ALLERGIC REACTION OCCURS, THE DRUG SHOULD BE DISCONTINUED AND APPROPRIATE THERAPY SHOULD BE INITIATED. SERIOUS ANAPHYLACTOID REACTIONS REQUIRE IMMEDIATE EMERGENCY TREATMENT WITH EPINEPHRINE, OXYGEN, INTRAVENOUS STEROIDS, AIRWAY MANAGEMENT, INCLUDING INTUBATION, SHOULD ALSO BE ADMINISTERED AS INDICATED.

#### Precautions

Prolonged use of antibiotics may promote the overgrowth of nonsusceptible organisms. If superinfection occurs during therapy, appropriate measures should be taken.

PREGNANCY. Pregnancy Category B. Reproduction studies have been performed in mice and rats at doses up to ten times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

NURSING MOTHERS. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when cyclacillin is administered to a nursing woman.

#### Adverse Reactions

The oral administration of cyclacillin is generally well tolerated.

As with other penicillins, untoward reactions of the sensitivity phenomena are likely to occur, particularly in individuals who have previously demonstrated

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125 mg per 5 ml:  
100 ml and 200 ml bottles  
250 mg per 5 ml:  
100 ml and 200 ml bottles

hypersensitivity to penicillins or in those with a history of allergy, asthema, or urticaria.

The following adverse reactions have been reported with the use of cyclacillin (in approximately 1 out of 20 patients treated): nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS.)

Other less frequent adverse reactions which may occur and that have been reported during therapy with other penicillins are: anemia, thrombocytopenia, purpura, leukopenia, neutropenia and eosinophil reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

#### Dosage and Administration

| INFECTION*                                   | ADULTS  | CHILDREN   |
|--|---|--|
| Respiratory Tract Infections & Pharyngitis** | 250 mg q.i.d. in equally spaced doses   | Dosage should be in a dose higher for adults<br>body weight <2 lbs: 125 mg q.i.d. in equally spaced doses<br>body weight 2-10 lbs: 250 mg q.i.d. in equally spaced doses |
| Bronchitis and Pneumonia                     | Mild or Moderate Infections: 250 mg q.i.d. in equally spaced doses<br>Chronic Infections: 500 mg q.i.d. in equally spaced doses | 50 mg/kg/day equally spaced doses<br>100 mg/kg/day equally spaced doses  |
| Otitis Media                                 | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity   | 50 to 100 mg/kg equally spaced doses depending on severity   |
| Skin & Skin Structures                       | 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity   | 50 to 100 mg/kg equally spaced doses depending on severity   |
| Urinary Tract                                | 500 mg q.i.d. in equally spaced doses   | 100 mg/kg/day in equally spaced doses  |

#### INFECTION\*

#### ADULTS

#### CHILDREN

Dosage should be in a dose higher for adults

body weight <2 lbs: 125 mg q.i.d. in equally spaced doses  
body weight 2-10 lbs: 250 mg q.i.d. in equally spaced doses

#### Bronchitis and Pneumonia

Mild or Moderate Infections: 250 mg q.i.d. in equally spaced doses  
Chronic Infections: 500 mg q.i.d. in equally spaced doses

Otitis Media: 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity

Skin & Skin Structures: 250 mg to 500 mg q.i.d. in equally spaced doses depending on severity

Urinary Tract: 500 mg q.i.d. in equally spaced doses

\*As with antibiotic therapy generally, treatment should be continued a minimum of 48 to 72 hours after the patient becomes asymptomatic; evidence of bacterial eradication has been obtained.

\*\*In infections caused by Group A beta-hemolytic streptococci, a minimum of 10 days of treatment is recommended to guard against the risk of relapse or glomerulonephritis.

In the treatment of chronic urinary tract infection, frequent bacteriologic clinical appraisal is necessary during therapy and may be required 1 to 2 months afterwards.

Persistent infection may require treatment for several weeks. Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure: Based on a dosage of 500 mg q.i.d., the following adjustment in interval is recommended:

Patients with a creatinine clearance of >50 ml/min need no interval adjustment.

Patients with a creatinine clearance of 30-50 ml/min should receive full doses every 12 hours.

Patients with a creatinine clearance of between 15-30 ml/min receive full doses every 18 hours.

Patients with a creatinine clearance of between 10-15 ml/min receive full doses every 24 hours.

In patients with a creatinine clearance of 10 ml/min serum creatinine values of >10 mg % serum cyclacillin levels are needed to determine both subsequent dosage and frequency.

# A Clinical Approach to the Choice of Antimicrobial Agents, Case Number 12: Fever and a Cutaneous Eruption

William C. Templeton, M.D., Julio C. Melo, M.D. and Martin J. Raff, M.D., Louisville, Kentucky

This is the twelfth in a series of articles that attempt to provide practicing physicians in the Commonwealth with practical guidelines for the use of antibiotics. A case history is presented, followed by choice of antimicrobial agents and explanations of why the authors choose one as the best agent.

A 42-year-old white male presents to hospital with a one month history of arthralgias without arthritis, and one week of low-grade fever. Two weeks prior to admission, perioral erythematous lesions developed, followed by similar lesions on the ankles. These subsequently spread to the soles and palms; they were nonpruritic. Sexual contact was limited to a single partner. The patient had noted no penile lesions, dysuria, urethral discharge, or inguinal adenopathy.

Physical examination revealed a well-developed afebrile white male in no distress. Pupils were equal, round, reactive to light and accommodation. Two whitish macular lesions without surrounding erythema were seen on the hard palate. Dry scaling erythematous lesions surrounded the mouth. The heart and lungs were normal; abdominal examination revealed no organomegaly. No urethral discharge was seen. Genital examination was remarkable for a 1.5 cm macular, non-tender lesion on the ventral shaft of the penis; shotty bilateral inguinal adenopathy was

appreciated. There were multiple small, discrete, reddish-brown papules seen on the palms, soles, and ankles. Neurological examination was normal.

Laboratory data was remarkable for hemoglobin 13.8 gm/dl, hematocrit 41.8%. White blood cell count was 8600/mm<sup>3</sup> with 62% neutrophils, 3% bands, 26% lymphocytes, 9% monocytes, and 3% eosinophils. Platelet count was 434,000/mm<sup>3</sup> with a Westergren erythrocyte sedimentation rate of 68mm/hour. Alkaline phosphatase and SGPT were three times normal; SGOT was twice normal.

What is the most likely diagnosis?

- A. Rocky Mountain Spotted Fever
- B. Secondary syphilis
- C. Disseminated gonococcemia
- D. Rubella (German measles)
- E. Serum sickness, or similar drug reaction

**Answer: B.** Secondary syphilis.

Rocky Mountain Spotted Fever must be considered in the differential diagnosis but more constitutional complaints are usual in that disease; i.e., severe headache, chills, myalgias, nausea, vomiting, and photophobia. In addition, the characteristic cutaneous lesions are usually petechial<sup>1</sup>. Gonococcemia commonly produces involvement of the distal extremities only, the lesions usually appearing vesiculopustular or hemorrhagic with a necrotic center; tenosynovitis, occasionally true arthritis and a more clinically ill patient are the rule<sup>2</sup>. Typical dermatologic findings in rubella include a faint macular erythema involving the face and neck initially, with spread to the trunk and extremities, rarely lasting more than three days. Although postauricular and occipital node enlargement are usually present, these findings may also be seen in infection with adenoviruses, ECHO viruses or Coxsackie viruses<sup>3</sup>. Serum sickness is often accompanied by fever

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## ANTIMICROBIAL AGENTS—Templeton, Melo and Raff

and arthralgias or frank arthritis; the cutaneous eruption is classically urticarial and intensely pruritic<sup>4</sup>.

Secondary syphilis follows primary syphilis with its typical hard chancre by one to two months. Symptomatology includes malaise, fever, headache, and sore throat; at least 80% of patients have obvious cutaneous or mucocutaneous lesions<sup>5</sup>. The first lesions to occur are macular, erythematous ones, initially on the sides of the trunk, shoulders, and flexor surface of the upper extremities<sup>6</sup>. These lesions are light red, with a heightened intensity in the center, blanch with pressure, and fade in about two weeks. Maculopapular lesions follow; coppery-red in color, they are seen on the face, chest, back, abdomen, palms, and soles. Mucous patches may be seen as slightly raised oval areas with an erythematous base covered with a gray membrane, occurring in the mouth or on the genitalia. Papular lesions are the last stage noted. They are darker red, and occur in the scalp, eyebrows, beard, palms, and soles—condyloma lata are variants. Rarely, pustular or annular lesions exist. Generalized vesicular lesions never occur. On occasion, anicteric hepatitis (as in this case), periostitis with lytic bone lesions, immune complex nephropathy with transient nephrotic syndrome, iritis, or anterior uveitis may occur in secondary syphilis<sup>5</sup>.

The VDRL was positive at a titer of 1:64, the FTA-Abs was 4+ reactive. The Weil-Felix test was non-reactive. There is no history of penicillin allergy.

What is the preferred therapy for this patient?

- A. Tetracycline, 500 mg p.o. qid for 15 days.
- B. Phenoxymethyl penicillin (Pen Vee K®), 250 mg p.o. qid for 15 days.
- C. Procaine penicillin G, 600,000 units IM daily for 15 days or benzathine penicillin G, 2,400,000 units IM weekly for 3 doses.
- D. Procaine penicillin G, 600,000 units IM daily for 8 days or benzathine penicillin G, 2,400,000 units IM once.
- E. Must rule out neurosyphilis before therapy can be recommended.

**Answer: D.** Procaine penicillin G, 600,000 units IM daily for eight days or benzathine penicillin G, 2,400,000 units IM once.

The above therapy is currently recommended by *The Medical Letter*<sup>7</sup> and The Center for Disease Control<sup>8</sup> for primary, secondary, or early latent syphilis. Alternative regimens in penicillin-allergic patients include tetracycline or erythromycin, 500 mg p.o. qid for 15 days.

Late latent or cardiovascular syphilis is treated with procaine penicillin G, 600,000 units IM daily for 15 days, benzathine penicillin G, 2,400,000 units IM weekly for three doses, or tetracycline or erythromycin, 500 mg p.o. qid for thirty days. Neurosyphilis is treated as is late latent or cardiovascular lues, with the added option of penicillin G, 2-4 million units IV q four hours for 10 days and the deletion of the use of benzathine penicillin G<sup>8</sup>. Treatment of late latent, cardiovascular, or neurosyphilis with tetracycline or erythromycin is not as effective as treatment with penicillin<sup>9</sup>, probably due to problems with patient compliance.

Benzathine penicillin G, 2,400,000 units IM is administered. Eight hours later, the patient complains of diffuse myalgias, headache and shaking chills. His temperature is 101°F orally and the macular lesions are more intense.

The most likely explanation for this phenomenon is:

- A. Viral upper respiratory infection.
- B. Infectious mononucleosis.
- C. Jarisch-Herxheimer reaction.
- D. Penicillin hypersensitivity reaction.
- E. Polymyositis.

**Answer: C.** Jarisch-Herxheimer reaction.

The Jarisch-Herxheimer reaction occurs six to eight hours after antitreponemal therapy is instituted (only the first dose) and is seen in half of patients with primary syphilis, 75% of those with secondary syphilis, and in 30% of those with neurosyphilis<sup>5</sup>. It is characterized by shaking chills, headache, myalgias, sore throat, fever, malaise, and exacerbation of the inflammatory reaction in sites of spirochetal localization. Severe exacerbation of signs and symptoms may occur in neurosyphilis. Proposed etiologies have included release of spirochetal endotoxins and/or a "hypersensitivity reaction" due to antigen-antibody complexes and hypocomplementemia. A viral illness with exanthem is a possibility, but shaking chills would be unusual, as would the temporal relationship to the administration of the antibiotic. Patients with clinically inapparent infectious mononucleosis have been reported to develop a macular erythematous cutaneous eruption resembling that of rubella, as well as a florid, often confluent eruption following the administration of ampicillin or amoxycillin<sup>10</sup>. A hypersensitivity reaction due to penicillin could produce fever and myalgias, but pruritus would be expected along with the cu-



# ANTIMICROBIAL AGENTS—Templeton, Melo and Raff

taneous eruption. Polymyositis is characterized by muscle weakness rather than myalgias, without dermatitis or with minimal skin lesions<sup>11</sup>.

The incidence of syphilis has decreased markedly since the discovery of penicillin and its antitreponemal activity in the early 1940's. However, it continues to be a significant public health problem. Reported cases of primary and secondary syphilis in the United States numbered 23,731 in 1976<sup>5</sup> and 15,314 in 1978; however, 17,653 cases have been reported through September of 1979<sup>12</sup>. Undoubtedly many more cases each year are not reported for various reasons.

Primary, secondary, and tertiary stages of the disease are recognized. Primary syphilis is characterized by the chancre, a small, papular, painless lesions developing on the genitalia in the majority of patients (though occasionally elsewhere). It appears ten to ninety days (average twenty-one) after intimate contact with a person with primary or secondary infection. The chancre is painful only if secondarily infected, or occurring on the finger. It later becomes ulcerated, with raised and indurated borders, resolving in two to six weeks (even if untreated), leaving a faint scar. Unilateral or bilateral regional adenopathy is usual<sup>5,8</sup>.

Secondary syphilis is discussed above. Latent syphilis starts with the first attack of secondary lues and lasts for a variable period of time thereafter. It is characterized by positive treponemal antibodies without clinical signs or symptoms of syphilis or abnormalities in the cerebrospinal fluid (CSF). Early latent syphilis is defined as the first year after infection; late latent implies infection for more than one year. Nearly one-third of all patients with late latent syphilis will eventually develop tertiary syphilis<sup>5,8</sup>.

Late (tertiary) syphilis consists of "benign" (gummatous), cardiovascular, and neurologic types. Gummas may be single or multiple, and occur in the skin, viscera, respiratory tract, and bones. Cardiac involvement includes aortic aneurysm formatic and/or aortitis with involvement of the coronary ostia or the aortic valve. Neurological manifestations of lues may be asymptomatic (deteced by elevated CSF protein and lymphocytic pleocytosis), or may be meningovascular (resembling aseptic meningitis), tabes dorsalis (posterior column and pupillary involvement), or general paresis.

The best means by which to establish the diagnosis of syphilis includes all of the following **except**:

- A. A rising titre in the VDRL test.
- B. A positive FTA-Abs test.
- C. A positive culture for *Treponema pallidum*.

D. A positive TPI test.

E. A darkfield examination of lesions showing spirochetes.

**Answer:** C. *Treponema pallidum* cannot be cultured routinely by the bacteriology laboratory.

Two types of antibodies develop in patients with active treponemal infection. The first (reagin) is non-specific, reacting with a non-treponemal cardiolipin-lecithin-cholesterol antigen, and detected by flocculation (VDRL, RPR, ART) or complement-fixation (Wasserman, Kolmer) methods. The second is specific for syphilis, reacting with treponemal antigens (FTA-Abs, TPI, MHA-TP).

The VDRL (Venereal Disease Research Laboratory) developed in 1946 is the standard test for detection of reagin. It is positive in about two-thirds of cases of primary syphilis and in at least 99% of patients with secondary syphilis, but only in 70% of those with cardiovascular or neurosyphilis. Usual titers are in the range of 1:64 to 1:256. It may be falsely negative early in primary syphilis or in the presence of a prozone phenomenon (due to antibody excess). False positives may occur but are usually in low titer (less than 1:8). A variety of conditions may cause false positive serum VDRL's, notably collagen vascular diseases, IV narcotics abuse, post-vaccination, aging, certain infections especially if accompanied by fever (malaria, mononucleosis), other spirochetal infections (yaws, pinta), and even pregnancy. A false positive VDRL in the CSF is extremely rare, and is usually secondary to contamination with blood at the time of the lumbar puncture. The VDRL becomes negative within one year in the overwhelming majority of patients treated for primary syphilis and within two years in those treated for secondary syphilis. However, in about 5% of patients it will never revert to negative (serofast state). Therapy is deemed adequate if the titer decreases fourfold. Therefore knowledge of prior titers is important in determining whether or not patients require retreatment when they appear with a positive serology, having had a positive test previously.

The *Treponema pallidum* immobilization test (TPI) was developed in 1949—a positive result is determined by inhibition of spirochetal mobility after incubation with the patient's serum and complement. It is very specific and sensitive, except for patients with primary lues. False positives may occur if a treponemicidal antibiotic (penicillin, etc.) is present in the patient's serum. Reversion to negativity is the rule after therapy, and this occurs more rapidly than with the VDRL.

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The FTA-Abs is the most commonly used test for detection of specific treponemal antibody. Spinal fluid or serum is diluted with Reiter strain treponemal "absorbent" to eliminate cross-reactivity with saprophytic treponemes, and the sample is then incubated with whole, nonviable Nichols strain treponemes on a slide and made visible by the addition of fluorescein-conjugated antihuman globulin. The serum FTA-Abs is positive in 85% of patients with primary syphilis, 99% with secondary, and at least 95% with tertiary. False positive and borderline values occur in sera with abnormal globulins (especially anti-nuclear antibodies) and occasionally in pregnancy or in patients with genital herpes or heroin addiction. The utility of the FTA-Abs test on CSF has not yet been conclusively proven.

The diagnosis of primary syphilis may be made by darkfield examination of the chancre or other cutaneous lesions, combined with a positive or increasing VDRL titer and positive FTA-Abs. If clinical suspicion is high but the above studies are negative, the VDRL should be repeated in two to four weeks. Secondary

syphilis may be diagnosed by the classic cutaneous manifestations and positive serology. Cerebrospinal fluid examination is recommended in all patients with a positive serum VDRL or FTA-Abs and neurologic abnormalities, and in patients with late latent syphilis. Typical CSF findings in neurosyphilis include a positive VDRL, elevated protein (greater than 40 mg%), and five or more white cells, usually predominantly lymphocytes.

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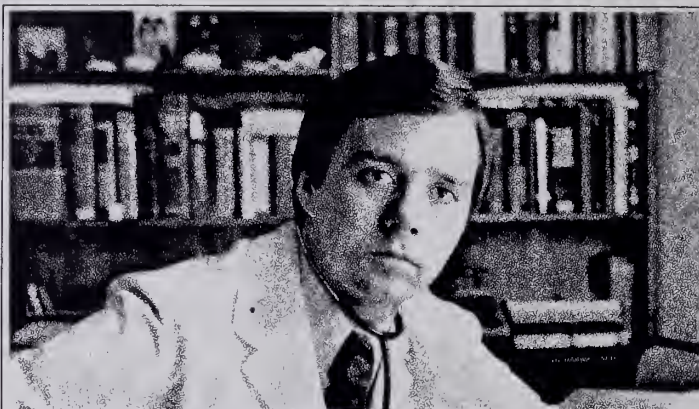
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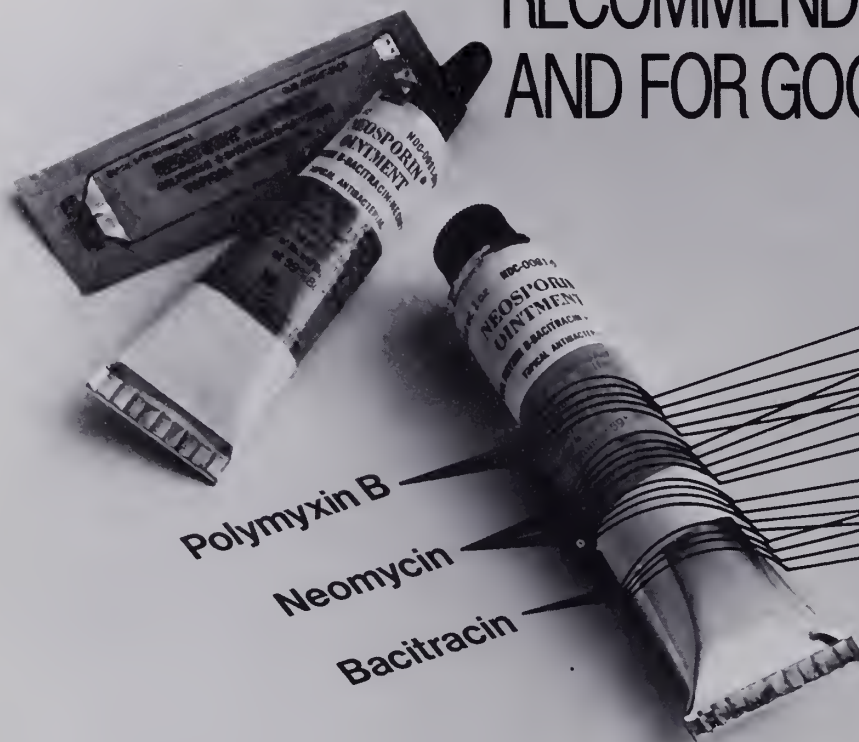
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4. contains three antibiotics that are rarely used systemically, so the risk of sensitization is minimal
5. you can recommend it in any of the three convenient package sizes: 1 oz tube, 1/2 oz tube, or the versatile, single-use foil packet

## NEOSPORIN® Ointment

(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs; in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

**WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching, it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

**PRECAUTIONS:** As with other antibacterial preparations,

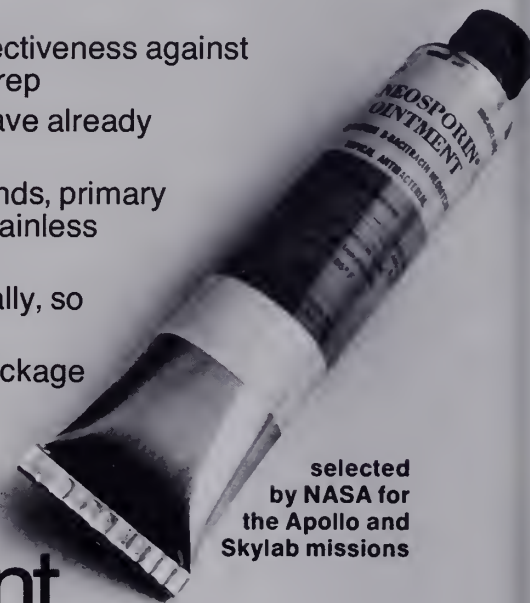
prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

**ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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# BOOK REVIEWS

## Clinical Cardiology

M. Sokolow and M. McIlroy, Lange Medical Publications, 718 pages. Copyright 1979

The second edition of *Clinical Cardiology* by Sokolow and McIlroy complements the series of reviews published by the Lange Medical Publications. Although the stated purpose was to correct and update the elegant first edition, this edition included many significant revisions and updating of pharmacology in cardiology.

The chapter on pericardial disease has been extensively revised. The illustrative electrocardiograms are useful, but their printing in this and several other chapters is not particularly sharp.

Myocardial disease has been thoroughly revised and more attention has been given to clarifying the tables. The extensive and updated bibliographies are very appreciated, especially to the non-cardiologist reader.

This review is probably designed for the non-cardiologist, resident and student. More emphasis should have been placed throughout the book on treatment—dosage schedule, side-effects and particu-

larly drug interactions and contraindications. The description of contemporary invasive and non-invasive diagnostic and therapeutic maneuvers was more extensive than necessary or expected in this type of a review. It would have been more useful to utilize this space to discuss drug pharmacology, applications and planning.

Algorithms for both diagnosis and therapy could have been included. Again, the reader most likely to use this book will look for information about cardiology that is palatable to his needs and applicable to his practice.

Having this excellent review in the library will be useful for all medical practitioners. It readily answers our need for current and continuing medical education in cardiology.

STEPHEN Z. SMITH, M.D.  
Louisville, Kentucky

### Notice To Contributors

Members of the Kentucky Medical Association reading papers before other organizations are asked to submit their papers to *The Journal* for consideration by the Editors for publication. Detailed instructions to contributors appear in the Scientific Section of *The Journal* under Manuscript Information. Please forward any papers to:

Paul C. Grider, Jr., M.D., Scientific Editor  
The Journal of the Kentucky Medical Association  
3532 Ephraim McDowell Drive  
Louisville, Kentucky 40205



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SUMMONS

To May 1979

Term

Udbr Obowbrt H

# AFTER ALL THOSE YEARS OF HARD WORK, SOMEONE FINALLY HANDS IT TO YOU.

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## Right To Life—Still Alive And Well

**N**ORTHERN Kentucky and Cincinnati hosted the National Right to Life Convention at Fort Mitchell, Kentucky on June 21-24, 1979. More than 2,000 delegates heard the regenerated program for the organization in speeches, workshops covering the range from press relations to effective political activity, and rallies. They emerged from the four days convinced, in the words of President Carolyn Gerster, M.D., Arizona internist, that "Right to Life (RTL) has come of age, matured and turned the corner," and will be able to "get a Human Life Amendment through Congress by 1982."

To achieve this ambitious program RTL relies on increased political clout, an increasingly rational appeal on a highly emotional subject, and an overwhelming persuasion that they are on the side of God and that moral right will ultimately prevail. Taking a page from the book of organized medicine, organized labor, etc., they have formed LIPE-PAC dedicated to elect pro-Life senators and congressmen and enjoyed considerable success in their first efforts.

The well reasoned approach to the subject was illustrated in the keynote address by William Brennan, Ph.D., sociologist at St. Louis University, author of the forthcoming book, "Medical Holocaust." His scholarly report followed medicine from the time of the life or death dealing with sorcerers through the life-saving post Hippocratic era to Germany in the 1930's and '40's. There he outlined the steps necessary to change a life protecting medical profession into the life destroying tool of a government on a eugenic killing binge. The disenfranchisement, depersonalization and ultimate destruction of unborn infants, aged, handicapped or simply undesirable people progressed in a slow, step wise fashion. First verbal degradation of any group to sub-human status was started, followed by denial of any rights for such a sub-human group. Language then was debased to change the word "kill" to some more acceptable term such as race improvement, resettlement, or even "final solution." Technical proficiency is a *sine qua non* of holocaust and

visual separation of the victim and operator is a great help in denial of the final horror. Dr. Brennan pointed out the similarities to the current abortion industry in this country. The unborn baby is always denied identification (product of conception), rights (unjust invader—destroyer of mother's privacy), and protection of law. Abortion never kills unborn babies in today's jargon; it "terminates pregnancies" or "extracts products of conception." Anyone doubting our technical proficiency in abortion need only contemplate that since 1963 over 6,000,000 unborn babies have been killed, equal to the number of Jews slaughtered in the Nazi holocaust. Small wonder that many schools of medicine have eliminated the Hippocratic Oath.

C. Everett Kopp, M.D., Philadelphia Pediatric Surgeon, spoke at the awards banquet on "Infanticide, The Silent Domino." He indicated that dominoes # 1 and 3, abortion and euthanasia fall with a loud clatter, while domino # 2, infanticide drops quietly and often with a sigh of relief. He pointed out the pressures which operate to make this form of killing appear merciful and sensible when viewed within the framework of situation ethics instead of from a position of respect for life and God's law. It becomes so easy in a medical environment which callously accepts experimentation on living aborted babies. He concluded that when helpless infants are not safe from destruction no person can feel secure.

At the final rally attended by 8,000 people on Fountain Square in Cincinnati, Dr. Jerry Falwell, pastor of Thomas Road Baptist Church in Lynchburg, Virginia, pointed out that life is a continuum and a gift from God. It's not at the sufferance of the state or any individual. He reminded his listeners that "Righteousness exalteth a nation: but sin is a reproach to any people." Proverbs 14:34. He noted a general decline from the high moral standards that have made this country great. Calling on the "Moral Majority" in America to return to the Judeo-Christian principles set forth in the Bible, he challenged them to claim the promise of II Chronicles 7:14, "If my people, which

are called by my name shall humble themselves and pray and seek my face, and turn from their wicked ways; then will I hear from heaven and will forgive their sin and will heal their land.”

For every physician, pro-Life or pro-Abortion-euthanasia, this convention has vast importance. It outlines the terms of the conflict, the time frame, and the conditions under which this subject will be decided. The Congress of the United States and the legislatures of the several States are to be the battleground with the citizens eventually making the decision.

The Journal publishes this summary so that you may be informed about what's developing on this controversial issue. Physicians will be guiding lights or villains

but will not be uninvolved. There remain several questions: Is Dr. Gerster right? Has RTL matured? Can the Human Life Amendment pass Congress by 1982? Is Dr. Brennan right? Are his parallels valid? Is Dr. Koop right? Has infanticide started in this country? How widespread is it? And finally, is Dr. Falwell right? Can the moral majority turn this country around? Is there a moral majority? Are you part of it? Should you be? You can't postpone your decision much longer.

THOMAS L. HEAVERN, JR., M.D.

## The Right To Life—The Right To Death

**F**OR years our profession, our government and our people have agonized trying to formulate principles to guide us in deciding when we can morally agree to an abortion or to the discontinuation of life support systems. Dispute and disagreement persist but there is resultant good. The public becomes better educated as to the important alternatives, and is better prepared to help physicians and the law make

decisions when the individual case touches their lives.

The patient and his loved ones, the law and physicians are learning better cooperation in these decisions. They will, with more time and struggle, evolve a consensus.

Let us continue to try.

AEO

*\*The views expressed here do not necessarily constitute official policy of the Association. KMA has never adopted a position in support of or in opposition to abortion. Guidelines were developed and adopted by the House of Delegates in 1973 that stipulated medical guidelines that should be followed if an abortion is to be performed.*

*Guidelines are available upon request from the KMA office.*

# JANUARY

is the month for you and your employees to join the KMA endorsed Group Health Care Program.

All member doctors and their employees are eligible for this special Kentucky Medical Association Program. Benefits include comprehensive coverage for hospitalization, surgical-medical expenses and a \$250,000 Major Medical program.

If your office has this Special Group Program, present employees not covered by your program may join during January. New employees may enroll within 60 days after they become eligible.

For more information, contact the Enrollment Department:  
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# "Success" Describes First Physician Recruitment Fair

**T**HE Kentucky Medical Association sponsored the first Physician Recruitment Fair in Kentucky on October 20, 1979. The Fair was co-sponsored by the University of Louisville School of Medicine, University of Kentucky College of Medicine, the Kentucky Hospital Association and the Rural Kentucky Medical Scholarship Fund.

Twenty-four exhibits representing 35 communities were present to recruit more than 100 physicians, residents, and medical students who attended. The exhibits offered a variety of practice opportunities from urban to rural. Three of the communities participating were in critical need of a physician's services. Many of the communities have already indicated they have received considerable interest in their practice opportunities from some of the participants.

The Association will be contacting communities in approximately six months to determine how successful the Fair was. Participants and exhibitors alike rated the Fair as good to excellent.

The one-day Fair consisted of two sessions. The morning session featured an orientation program on how communities could best utilize their resources to recruit physicians to their area. Participants heard presentations on the "Role of Communities in Physician Recruitment," "How to Utilize Medical Scholarship," "Factors Determining a Physician's Choice" and the "Role of Medical Schools in Physician Recruitment."

The luncheon speaker, Thomas Bruce, M.D., Dean of the University of Arkansas, concluded the morning session with an interesting presentation on how his university became involved in physician recruitment. Arkansas University initiated the concept behind Physician Recruitment Fairs and it is in part responsible for KMA's Physician Recruitment Fair.

The afternoon session was devoted to the Physician Recruitment Fair. Those attending the Fair felt the concept offered an excellent opportunity for communities to meet with prospective candidates and for the candidates to review the numerous practice opportunities available in Kentucky.

The Association received excellent news media coverage on the Recruitment Fair and KET of Kentucky plans to do a one-hour program about the Fair on Tuesday, December 4, 1979 at 7:30 p.m. The Fair was a major success and it is anticipated by the Membership and Placement Services Committee Chairman, John M. Baird, M.D., that the program may become an annual event.



Prospective candidates discuss practice opportunities with one of the exhibitors.



Thomas Bruce, M.D., Dean of the University of Arkansas College of Medicine, was the keynote speaker of the Fair.



Millie Fazzey, from KET television, interviewed John Baird, M.D., Chairman of the Membership Committee.



Camera crews from KET television covered events during the entire Fair.



Donald Chothom, M.D., Trustee R.K.M.S.F., discussed the benefits of the Fund.



Left to right. Donald E. Cloy, M.D., A.C. Lonkton and Donald Chothom, M.D., porticipoted in panel discussions.



Colorful exhibits representing 35 communities were highlighted of the Fair.



One-to-one conctact helped communities sell their opportunities.



More than 100 prospective candidotes attended the Fair.



## KMA Provides Placement Service To Physicians, Communities

Perhaps you have just completed your internship, residency, or have some other reason for needing to make a change. Perhaps you are a physician in practice and need an associate or replacement. If so, the KMA Physicians Placement Service is available to help you.

The Physicians Placement Service is designed to help physicians find a desirable area in which to establish a practice or to relocate and to help established physicians find associates.

A quarterly listing of "Opportunities for Practice in Kentucky" is published by the Placement Service. This report lists over 100 areas in Kentucky that need primary care practitioners either in association with another physician or as a replacement. The Service maintains a similar listing of areas in need of medical specialists. Opportunities for partnership or group practice are also listed and requests are accepted from both physicians and communities for satisfactory placement.

As an additional service the KMA Physicians Placement Service also publishes, "Physicians Seeking Locations," a quarterly listing. This is compiled from data received from the American Medical Association, requests from recipients of the Rural Kentucky Medical Scholarship Fund, interns and residents in Kentucky, and personal inquiries to the KMA office.

It is the policy of the Placement Service to provide a two-way flow of information between interested parties, rather than try to "place" physicians in the "right" practice situation.

The Service sends a questionnaire to the applicant physician to obtain information on his educational background, his interests, and preference of type of practice. Upon return of the questionnaire, the physician is sent a list of openings in his area of interest. Each opening is detailed on its facilities for home life, office space, proximity to hospital facilities, and other specifics.

Each physician contacting this office for assistance in finding a suitable location for practice is requested to complete a questionnaire in order that his name may be carried on the next listing of "Physicians Seeking Locations."

All qualified physicians who request assistance from the Placement Service are given help. An applicant need not be a member of the Kentucky Medical Association and there is no charge either to the physician or to the community seeking the services of this program.

Inquiries may be addressed to the Physicians Placement Service, Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.



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## Headquarters Activity

### NOVEMBER

- 8 Board of Licensure, Louisville
- 8 CME Committee, Louisville
- 13 *Journal* Editors, Louisville
- 21 Emergency Medical Seminar Committee, Louisville
- 22-23 Office Closed
- 28 Medical Advisory Committee, Frankfort
- 29 Community and Rural Health, Louisville

### DECEMBER

- 1-5 AMA Interim Meeting, Honolulu
- 11 *Journal* Editors, Louisville
- 12 Specialty Group Presidents, Louisville
- 11-13 FLEX Exams, Louisville
- 12-13 Board of Trustees, Louisville
- 24-25 Office Closed

### JANUARY

- 1 Office Closed
- 3-5 AMA State Health Legislation Meeting, Phoenix, Arizona

Phillip G. Morrow, M.D., Milwaukee, Wis.  
 Charles Sarasohn, M.D., Louisville  
 Daniel C. Scullin, M.D., Louisville  
 James L. Sublett, M.D., Louisville  
 Lloyd R. Taustine, M.D., Madison, Ind.  
 J. Kent Thomas, M.D., Oklahoma City, OK  
 Roy D. Upton, M.D., Louisville  
 Molloy G. Veal, M.D., Louisville  
 Ronald L. Williams, M.D., Louisville

### LESLIE

S. D. Palmer, M.D., Hyden

### MASON

Gary Sanders, M.D., Maysville  
 Michael Stephens, M.D., Maysville

### McCRACKEN

Edwin L. Grogan, M.D., Paducah  
 William G. Wheeler, II, M.D., Paducah

### NELSON

Michael C. Hess, M.D., Bardstown

## Digest of Proceedings Board of Trustees September 27, 1979

Acting as temporary Chairman, KMA Secretary-Treasurer, S. Randolph Scheen, M.D., introduced the newly elected members of the Board of Trustees and the new officers:

Frank R. Pitzer, M.D., Hopkinsville, President-Elect  
 Richard J. Menke, M.D., Crestview Hills, Vice President  
 Henry R. Bell, M.D., Elkton, Trustee, Third District  
 William P. McElwain, M.D., Lawrenceburg, Trustee, Seventh District

Robert E. Smith, M.D., Covington, Trustee, Eighth District

The Board then elected the Executive Committee members to serve with the President, President-Elect, Vice President, and Secretary-Treasurer for the 1979-80 Associational year. Chosen as Board Chairman was Dwight L. Blackburn, M.D., Berea; and William T. Watkins, M.D., Somerset, was selected as Vice Chairman. R. J. Phillips, M.D., Owensboro, and Richard F. Hench, M.D., Lexington, were also named to the Executive Committee.

Elected to serve on the Board of Directors of the Kentucky Foundation for Medical Care was Earl P. Oliver, M.D., Scottsville.

Elected to the KEMPAC Board were James E. Anderson, M.D., Owensboro, Second District; Edward C. Shrader, M.D., Louisville, Third District; Raymond J. Timmerman, M.D., Ft. Thomas, Fourth District; and John C. Cheshire, Jr., M.D., Sixth District.

The Board reviewed the Executive Committee's recommendations for committee personnel, made appropriate changes and additions, following which committee membership for the 1979-80 Associational year was approved.

A motion was made, seconded, and carried that KMA hold its 1980 Annual Meeting at the Ramada Inn Bluegrass Convention Center. It was also tentatively agreed to hold the 1982 Annual Meeting at the Hyatt Regency Hotel in Lexington.

Before adjourning, the Chairman set the date of the next Board of Trustees' meeting as December 12-13, 1979, at the KMA Headquarters Office in Louisville.



## Members in the news

### HONORS BESTOWED

Kentucky Congressman, Tim Lee Carter, M.D., was honored in The Congressional Record, June 15, for his work in protecting voluntarism and charitable giving to non-profit hospitals. Doctor Carter received the "Outstanding Achievement Award" of the National Association for Hospital Development.

### NEW MEMBERS

#### CAMPBELL-KENTON

Donald A. Saelinger, M.D., Ft. Thomas

#### CHRISTIAN

J. Nicholas Terhune, M.D., Hopkinsville

#### CLARK

Marvin Bishop, M.D., Winchester

#### FRANKLIN

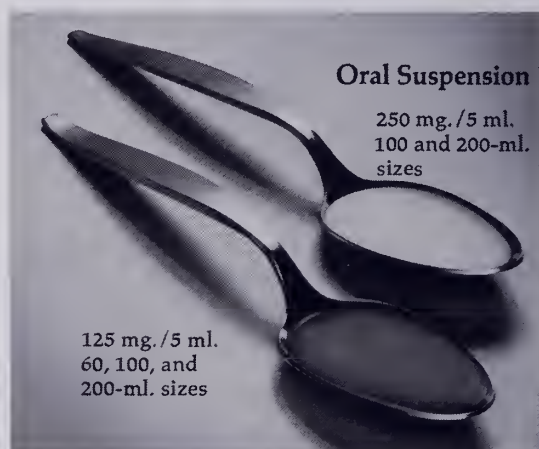
Richard Kimbler, M.D., Frankfort

#### JEFFERSON

Roshi Azzam, M.D., Louisville  
 James D. Charasika, M.D., Louisville  
 Saramma Cherian, M.D., Louisville  
 Paul Davis, student, Louisville  
 James A. Dienes, M.D., Louisville  
 John I. Gedmark, M.D., Louisville  
 Ronald J. Hamm, M.D., Louisville  
 John E. Harting, Jr., M.D., Louisville  
 Michael D. John, M.D., Louisville  
 Dorothy E. Mitchell, M.D., Louisville



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# The David Barrow Memorial Meeting of the Kentucky Medical Association

Ramada Inn, Bluegrass Convention Center, Louisville, Kentucky, September 25-27, 1979

Digest\* of Proceedings of the Regular Sessions of the

## HOUSE OF DELEGATES

Bennett L. Crowder, II, M.D., Hopkinsville

Speaker of the House, Presiding

### First Session

Speaker Crowder called the 129th Meeting of the KMA House of Delegates to order at 9:10 a.m. and asked Paul J. Parks, M.D., Bowling Green, to give the invocation. He then called on J. Roy Biggs, M.D., Somerset, Chairman of the Credentials Committee, to give the report of the Credentials Committee. Doctor Biggs reported that a quorum was present. A motion was made, seconded, and passed that the Minutes of the 1978 session of the House of Delegates be approved as published in the December, 1978, *Journal of the Kentucky Medical Association*.

S. Randolph Scheen, M.D., Louisville, KMA Secretary-Treasurer, gave several announcements. He noted that scientific sessions would begin at 8:50 a.m. Tuesday in the Convention Center; and stressed that the highlight of the Annual Meeting, the President's Luncheon, would be held in the Convention Center on Wednesday at 11:50 a.m. Doctor Scheen reminded the Delegates that the Nominating Committee for general offices would meet at the close of the first session of the House, and Reference Committees would convene at 2:00 p.m. Monday in various rooms of the Convention Center.

Doctor Scheen then recognized the president of the American Medical Association, Hoyt D. Gardner, M.D., of Louisville, and noted that Doctor Gardner is the eighth Kentucky physician to serve as AMA president.

Doctor Scheen read a list of member physicians who had died since the 1978 meeting of the House of Delegates, following which the members of the

House stood for a moment of silent tribute. The names of the physicians, their locations, and dates of death are as follows:

|                           |                  |                   |
|---------------------------|------------------|-------------------|
| Harry J. Batts, Jr.       | Lexington        | December 6, 1978  |
| Edsel H. Burton           | Faubush          | January 19, 1979  |
| Alvin Coxwell             | Louisville       | June 26, 1979     |
| Theodore Roosevelt Davies | Barbourville     | June 7, 1979      |
| John William Ford         | Inez             | December 10, 1978 |
| Elias Futrell             | Cadiz            | February 16, 1979 |
| Raul C. Gonzalez          | Bedford, Ind.    | November, 1978    |
| Airzzie Greene            | Middletown       | November 10, 1978 |
| Byron Newton Harrison     | Owensboro        | January, 1979     |
| Meyer Stanley Jolson      | Covington        | December 21, 1978 |
| Ronald L. Jones           | New Albany, Ind. | November 22, 1978 |
| James M. Kinsman          | Louisville       | August, 1979      |
| U. M. Masmitja            | Glasgow          | December, 1978    |
| Charles F. Moller         | Lexington        | May 21, 1979      |
| William F. Owsley         | Burkesville      | 1979              |
| Thurman M. Perry          | Jenkins          | July 15, 1979     |
| Elliott Podoll            | Louisville       | July 1, 1979      |
| Sidney Robby              | Louisville       | September, 1978   |
| Douglas E. Scott          | Lexington        | November, 1978    |
| Frank A. Simon            | Louisville       | January 18, 1979  |
| William Seth Snyder Jr.   | Frankfort        | October 25, 1978  |
| John D. Trawick           | Louisville       | November 2, 1978  |
| James F. Van Meter        | Lexington        | December 5, 1978  |
| James S. Williams         | Nicholasville    | October 27, 1978  |

Doctor Crowder announced the Reference Committee appointments as follows:

### Reference Committee No. 1

Donald R. Neel, M.D., Owensboro, Chairman  
W. E. Becknell, M.D., Manchester  
R. Kendall Brown, M.D., Georgetown  
Willis P. McKee, M.D., Shelbyville  
Carroll H. Robie, M.D., Louisville

### Reference Committee No. 2

Edwin J. Nighbert, M.D., Lexington, Chairman  
James S. Brashear, M.D., Central City  
William M. Carney, M.D., Elizabethtown  
Michael B. Flynn, M.D., Louisville  
Wiley E. Kozee, M.D., Ashland

### Reference Committee No. 3

W. Bruce Hamilton, M.D., Shepherdsville, Chairman  
James P. Moss, M.D., Louisville  
N. H. Talley, M.D., Princeton  
John E. Trevey, M.D., Lexington  
William R. Yates, M.D., Hebron

\*Editorial Note: A tape recording was made of the two sessions of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recordings.

#### Reference Committee No. 4

Glenn W. Bryant, M.D., Louisville, Chairman  
Peter P. Bosomworth, M.D., Lexington  
Cecil D. Martin, M.D., Carrollton  
William B. Monnig, M.D., Erlanger  
Nelson B. Rue, M.D., Bowling Green

#### Reference Committee No. 5

Robert E. Smith, M.D., Covington, Chairman  
James C. Embry, M.D., Paducah  
Allen E. Grimes, M.D., Lexington  
David E. Townes, M.D., Louisville  
Terry L. Wright, M.D., Elkhorn City

#### Reference Committee No. 6

Don E. Cloys, M.D., Richmond, Chairman  
D. Kay Clawson, M.D., Lexington  
C. Douglas LeNeave, M.D., Mayfield  
Edward N. Maxwell, M.D., Louisville  
R. D. Pitman, M.D., Williamsburg

Doctor Crowder announced that the Tellers for both sessions would be Glenn U. Dorroh, M.D., Lexington, Chairman; Albert H. Joslin, M.D., Owensboro; and Paul W. Walstad, M.D., Harlan.

The Speaker then asked Emanuel H. Rader, M.D., Pineville, a member of the Rules Committee, to read the report of the Rules Committee. The Committee's report, as it was printed in the Delegates' Reports Book, is printed below:

### Report of the Rules Committee

The Rules Committee was established by the House of Delegates in September, 1978, to consider the method of handling items before the House, to suggest adoption or modification of rules of order, and to generally assist and advise the Speakers.

As directed by the House of Delegates, the Committee is composed of five members and appointed by the Speaker. Recommendations made by the Committee must be submitted at the first session of the House and must receive two-thirds majority approval for adoption and implementation.

If it is to be implemented, the report cannot be amended. If the recommendations are to be amended, they are to be referred to the appropriate reference committee and reported back at the second session of the House of Delegates for further action.

Your Rules Committee has met and offers the following recommendations for adoption:

1. Committee reports should be written so that the body of the report contains general information and background material, and all Committee recommendations should be listed at the end of the report to facilitate review by reference committees and the House of Delegates.

2. Consent Calendar—Each reference committee may place on the Consent Calendar any topic assigned to it for discussion and recommendation which is not controversial. Only items for which the Committee has heard no opposition, and which they are recommending be *adopted* or *filed*, may be placed on the Consent Calendar, listing the topic and the Committee recommendation. This will be done to facilitate proceedings. Any Delegate may ask that a topic be withdrawn from the Consent Calendar for discussion. Split reports (e.g., one portion recommended for approval; the other, for rejection) cannot be placed on the Consent Calendar.
3. It is recommended that no changes be made to the Bylaws relating to the Rules Committee, its function or recommendations. This concept should be given the opportunity for trial, and requires the flexibility of session by session approval.
4. The Rules Committee recommends that it serve as an advisory body to the Speakers on the conduct and operation of the House of Delegates.
5. The Committee strongly urges all Delegates to register before **each session** of the House to insure proper credentialing and a valid count in the event of a roll call vote. Non-registered Delegates cannot properly vote.
6. The Committee recommends adoption of a rule which was used last year whereby the motion to terminate debate would be accepted by the Speaker, but at the Speaker's option, would not necessarily be called for until at least one member of the opposing viewpoint could be heard.
7. The Rules Committee reviewed the Speakers' instructions on reporting procedures to reference committee chairmen and members of the House of Delegates, and recommends that they be distributed with the changes discussed during the Committee meeting. (The reference committees should use the word "adopt," rather than "accept" or "approve.")

William E. Jackson, M.D.  
Chairman

A motion was made, seconded, and carried unanimously to accept the Report of the Rules Committee.

Doctor Crowder called on Carl Cooper, Jr., M.D. to give a brief Presidential address, following which the other officers gave their reports.

The Speaker then asked the two AMSA Presidents to give their reports. Ms. Paula Phelps-Weaver, Uni-



versity of Kentucky Chapter President of the American Medical Students' Association, and Ms. Nancy Newman, University of Louisville Chapter AMSA President, were both present and addressed the House.

Doctor Crowder stated he was pleased to introduce the Chairman of the AMA Board of Trustees, Lowell H. Steen, M.D., from Hammond, Indiana, who made several remarks regarding the magnitude of the health care industry.

Doctor Crowder thanked Doctor Steen for his remarks, and asked Ballard W. Cassady, M.D., Pikeville, President of the Kentucky Medical Insurance Company, to update the members on the status of their insurance company.

The Kentucky Chapter of the American Association of Medical Assistants hosted a coffee break in the lobby for the House members.

Doctor Cooper was again called to the podium to present the first annual KMA Educational Achievement Award. Frank R. Lemon, M.D., Lexington, the recipient of the award, thanked the House members for the honor and made a few additional comments.

The reports of the officers and committees were presented by the Speaker and referred to a Reference Committee as follows: (Only the reports of the officers are read.)

Report of the President—Reference Committee No. 1

Report of the President, Auxiliary to KMA—Reference Committee No. 1

Report of the President-Elect—Reference Committee No. 1

Report of the Speaker and Vice Speaker of the House—Reference Committee No. 1

Report of the Chairman, Board of Trustees—Referred to Reference Committee No. 1 with the following exceptions: Special Report A, Report of the Ad Hoc Committee on Health Care Costs, was referred to Reference Committee No. 4; and Special Report B, Continuing Medical Education Records, was referred to Reference Committee No. 2

Report of the Secretary-Treasurer—Reference Committee No. 1

Report of the Editor—Reference Committee No. 1

Report of the Delegates to AMA—Reference Committee No. 1, with the following exceptions: Report UU of the AMA Board of Trustees and the Report of the AMA Ad Hoc Committee on Medical Ethics were referred to Reference Committee No. 6

Report of the Executive Vice President—Reference Committee No 1

Report of the Judicial Council—Reference Committee No. 6

Report of the Rural Kentucky Medical Scholarship Fund—Reference Committee No. 6

Report of the President, Kentucky Blue Cross and Blue Shield—Reference Committee No. 4

Report of the Scientific Program Committee—Reference Committee No. 2

Report of the Scientific Exhibits Committee—Reference Committee No. 2

Report of the Continuing Medical Education Committee—Reference Committee No. 2

Report of the Cancer Committee—Reference Committee No. 2

Report of the Maternal Mortality Study Committee—Reference Committee No. 3

Report of the Committee on Maternal and Child Health—Reference Committee No. 5

Report of the Hospital Committee—Reference Committee No. 2

Report of the Advisory Committee to Blue Cross and Blue Shield—Reference Committee No. 4

Report of the Committee on Occupational Health and Environmental Quality—Reference Committee No. 3

Report of the Physician-Attorney Liaison Committee—Reference Committee No. 6

Report of the KMA-Kentucky Nurses Association Joint Practices Committee—Reference Committee No. 6

Report of the Claims and Utilization Review Committee—Reference Committee No. 4

Report of the Committee on National Legislative Activities—Reference Committee No. 3

Report of the Committee on State Legislative Activities—Reference Committee No. 3

Report of the Committee on Medicare and Other Governmental Medical Programs—Reference Committee No. 5

Report of the Committee on HSAs—Reference Committee No. 5

Report of the Technical Advisory Committee on Physician Services (Title XIX —Reference Committee No. 5

Report of the Advisory Committee to the KMA Auxiliary—Reference Committee No. 1

Report of the Committee on Community and Rural Health—Reference Committee No. 5

Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports—Reference Committee No. 5

Report of the Emergency Medical Care Committee—Reference Committee No. 2

Report of the Committee on Health Care Costs—Reference Committee No. 4

Report of the Membership and Placement Services Committee—Reference Committee No. 6

Report of the County Society Presidents' Advisory Committee—Reference Committee No. 1

Report of the Interspecialty Council—Reference Committee No. 2

Report of the Committee on Physicians' Health—Reference Committee No. 3

Report of the Committee to Study the Constitution and Bylaws—Reference Committee No. 6

Report of the McDowell House Board of Managers—Reference Committee No. 6

Report of the KMA Advisory Committee to KPRO—Reference Committee No. 4

Report of the Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement—Reference Committee No. 4

### New Business

New business was presented to the House by the Speaker and referred to the Reference Committee indicated:

(A) Resolution from Daviess County Medical Society concerning Inappropriate Requirements for Staff Membership—Reference Committee No. 2

(B) Resolution from KMA Board of Trustees concerning Support of Kentucky Medical Insurance Company—Reference Committee No. 3

(C) Resolution from Nelson County Medical Society concerning the Direction of Physician Extenders—Reference Committee No. 3

(D) Resolution from Nelson County Medical Society concerning Functions of Boards of Health—Reference Committee No. 5

(E) Resolution from Franklin County Medical Society concerning Certificate of Need—Reference Committee No. 3

(F) Resolution from Floyd County Medical Society concerning Medicare Reimbursement Areas—Reference Committee No. 5

(G) Resolution from Pulaski County Medical Association concerning County Board of Health Non-Medicaid Screening Programs—Reference Committee No. 5

(H) Resolution from Jefferson County Medical Society concerning Repeal of Optometric Drug Law—Reference Committee No. 3

(I) Resolution from Jefferson County Medical Society concerning Brain Cessation and Death—Reference Committee No. 6

(J) Resolution from Jefferson County Medical Society concerning Ethics Involved in the Disclosure of Laboratory Charges—Reference Committee No. 6

(K) Resolution from Pennyryle Multi-County Medical Society concerning Function of District Utilization Review Committee—Reference Committee No. 4

(L) Resolution from Harlan County Medical Society concerning Physicians' Assistants—Reference Committee No. 3

(M) Resolution from Fayette County Medical Society concerning Procedural Assistance for Physicians Conducting Examinations on Victims of Sexual Offenses—withdrawn

(N) Resolution from Fayette County Medical Society concerning Prescription Forgeries and Abuse of Controlled Substances—Reference Committee No. 4

(O) Resolution from Fayette County Medical Society concerning Rural Kentucky Medical Scholarship Fund—Reference Committee No. 6

(P) Resolution from KMA Board of Trustees concerning Physicians' Assistants—Reference Committee No. 3

(Q) Resolution from Pennyryle Medical Society concerning Establishing the Muhlenberg County Medical Society—Reference Committee No. 6

Vice Speaker Campbell announced the meeting places for the Nominating Committee and for the trustee districts electing Trustees and Alternates. He stated the Nominating Committee would report at the close of the first scientific session on Tuesday morning, as well as at the second meeting of the House of Delegates on Wednesday evening.

The physicians on the Nominating Committee were named as follows: W. Bruce Hamilton, M.D., Shepherdsville, Chairman; William E. Becknell, M.D., Manchester; Glenn U. Dorroh, M.D., Lexington; Charles R. Oberst, M.D., Louisville; and W. Eugene Sloan, M.D., Paducah.

The meeting was adjourned at 11:25 a.m.

### Second Session

Speaker Crowder called the second session of the House of Delegates to order at 6:05 p.m. on September 26, 1979, and asked Harold L. Bushey, M.D., Barbourville, to give the invocation. Doctor Biggs reported a quorum was present.

Doctor Scheen was then called to the podium for announcements and recognition of guests from neighboring state medical associations who had attended KMA's Annual Meeting. Included were: Lowell H. Steen, M.D., Chairman, AMA Board of Trustees; Arvine G. Popplewell, M.D., President, Indiana State Medical Association; Stephen D. Ward, M.D., President, West Virginia State Medical Association; Robert G. Thomas, M.D., President-Elect, Ohio State Medical Association; and several visitors from the South Carolina Medical Association: Euta M. Colvin, M.D., Chairman of the Council; Harrison L. Peeples, M.D., President; Halsted M. Stone, M.D., President-Elect; J. Gavin Appleby, M.D., Speaker of the House; and Blake Williams, Director of Administration.

The Speaker briefly explained how items appearing on the consent calendar would be handled. Each item on the calendar would be read individually by the Reference Committee Chairman, and if any member wished to question or debate any topic, he could



ask for the floor and would be recognized. If no question was called, it would be taken by consent that all items appearing on the consent calendar would be adopted or filed by the House, as indicated.

## REFERENCE COMMITTEE NO. 1

*Donald R. Neel, M.D., Owensboro  
Chairman*

Reference Committee No. 1 considered the following reports:

1. Report of the President
2. Report of the President, Auxiliary to KMA
3. Report of the President-Elect
4. Report of the Speaker and Vice Speaker of the House
5. Report of the Chairman, Board of Trustees, **except**  
Special Report A—Report of the Ad Hoc Committee on Health Care Costs, and  
Special Report B—Continuing Medical Education Records
6. Report of the Secretary-Treasurer
7. Report of the Editor
8. Report of the Delegates to AMA; **except**  
Report UU (AMA Board of Trustees), and  
Report of the AMA Ad Hoc Committee on the Principles of Medical Ethics
9. Report of the Executive Vice President
30. Report of the Advisory Committee to the KMA Auxiliary
36. Report of the County Society Presidents' Advisory Committee

Reference Committee No. 1 reviewed the following reports and recommends they be adopted or filed as indicated, by the consent of the House, without discussion:

### Report of the President

I begin this report with mixed emotions. I am pleased that I have had the opportunity to serve you this year as President, yet I am sorry to see the year end. At this time of the year all of the travel, time away from home and office, concern over talks and business, seem in the distant past.

I am looking forward to the coming year as your Immediate Past President, and I hope that I will be able to continue to make a contribution even more than I have during the past two years.

As many of you know, I have been intimately involved with KMA since 1953 when I first served as a delegate. Since that time, I have served in many capacities, all of which I have thoroughly enjoyed. During this time, I have seen the emphasis on political and socio-economic issues consume more of our time, challenge our objectives of continuing medical education and scientific pursuits, and in some instances, divide our House. Most of these pressures are fostered by bureaucratic programs which threaten the freedom of the practice of medicine.

It is extremely important that medicine does not lose its perspective and allow the political problems to subjugate our prime purpose of improvement of health care for all—but on second thought—without freedom from excessive political

pressure and governmental intervention, American medicine cannot function effectively.

### I. KMA And AMA Membership

Once again, as I have done several times in the past, I urge all of you to become "missionaries" for the cause of organized medicine. Do your best to recruit new active members for KMA and AMA. Only through strength in numbers and full representation can we combat governmental intervention which would control our profession and in turn would increase the quality and quantity of medical care for American citizens.

I would like to remind you, as Dr. Hoyt Gardner, AMA President, most recently stated, all physicians, whether members or not of KMA or AMA, benefit from the scientific and socio-economic programs of organized medicine. Since this is true, why should not all physicians be willing to contribute their share?

### II. Cost Containment

Cost containment has and continues to be, foremost in our view and will be a permanent issue again this year. As you know, this has been my project this past year, and I have spoken about and have written about cost containment until I feel sure many of you are tired of it. But we must continue to show that the profession is responsive and can continue to do the job better than any other segment on a voluntary program.

### III. Medicare & Medicaid

One problem which continues to bug our Association is that of adequate Medicaid-Medicare reimbursement, and especially the feeling of many physicians that the three-area level of reimbursement is morally and professionally unfair. The officers and staff of KMA continue to try at all levels to find answers to these problems, and we welcome suggestions or solutions which are within our capabilities. Only a few months ago we again asked representatives in Washington for renewal of effort in this direction. I, as all other physicians who accept Medicare/Medicaid patients, feel that we are being used by the program, are not given due consideration, and in turn, in many instances are being harassed and investigated to the point of forcing us to re-consider our participation. The feeling of dedication and consideration for the patient is the only reason for the continuation of many physicians in the program.

### IV. K.M.I.C.

I am proud that during my year as President, the K.M.I.C. has become a reality and that we physicians in Kentucky do not have to fear being denied or dropped from liability insurance programs without due cause and at the whim of the carriers. As you know, we are now capitalized and in operation. This is our company and our program so let us all support it.

We must acknowledge the great assistance of P.I.C.O. of Ohio and Mr. Joe Gilmore and Mr. David Rader without whom we probably would not have succeeded.

### V. KMA Auxiliary

I would like to commend the Auxiliary for its outstanding work on behalf of organized medicine, especially in the AMA-ERF program.

I would also urge the officers and staff of KMA to call upon Auxiliary participation in any of our programs where additional energy and impact is needed. As Chairman of the



Legislative Committee, I am looking forward to close cooperation with the Auxiliary. Their potential is great.

## VI. Legislation

We are now facing another session of the Kentucky General Assembly, and we are attempting to anticipate many of the problem areas which may arise. We have met with the Interspecialty Council and have urged all specialty groups with specific legislative programs to coordinate them through our Legislative Committee. The response has been good, and I feel that this year we will have a more concentrated effort for our offense and defense on the legislative field.

Please do not hesitate to call our Frankfort office or call me personally if we may be of assistance.

I feel that our relationship with our members of Congress in Washington is enhanced by our Washington Dinner, and this also gives those of us interested in legislation first hand knowledge of what is being done by AMA on the National level.

KEMPAC Continues to be of vital importance to our legislative program, but for some reason, many physicians do not seem to realize this. The way most of us spend money but still will not support our own political activities does not make sense. Still, over and over, you hear the same non-involved physicians criticize the AMA, KMA, and legislators for not doing anything for medicine.

## VII. Officers And Committees

I am pleased to have had the opportunity to serve as KMA President at the time of the inauguration of Doctor Hoyt Gardner as President of AMA, and all of Kentucky medicine is justly proud of the eighth Kentuckian to hold that distinguished office.

I wish to thank all officers of the KMA, the Chairman of the Board of Trustees, all members of the Board of Trustees, all chairmen and members of the committees of KMA who have worked so diligently this past year. With people of this dedication and enthusiasm, the position of President is a pleasure and without pain.

## VIII. KMA Staff

I could not find enough time, space or words to express my gratitude and affection for all of our KMA staff. From our Executive Vice President, Mr. Bob Cox and his executive staff, to all secretaries and other personnel at Headquarters, I will always be indebted to you.

In traveling to other states and talking with their officers and staff, I realize how fortunate we are and in how much esteem our staff is held by other associations and on the national level.

Our staff is in truth more interested and dedicated to KMA and medicine than many of our own physicians.

Thanks to all of you.

In conclusion, I am honored and proud to have had the opportunity to serve as President of KMA, and I look forward to continuing to serve in any capacity where I may be of benefit.

KMA is and has been an important part of my life.

Thank you  
Carl Cooper, Jr., M.D.  
President

## Report of the President, Auxiliary to KMA

The theme for this year has been "The Challenge of Change . . . The Challenge of Growth." I chose this theme because I felt it was a big challenge to change our annual convention from fall to spring, especially since the meeting in the spring could not be in conjunction with the physicians' convention. The convention was held in April in Lexington at the Hyatt Regency Hotel. It was the ending of our first full year of change and a time for review. The registration was 120 members, with 81 being voting delegates. I feel the change has been most beneficial. The state auxiliary is now on the same rotation as the county auxiliaries and the national auxiliary; it is a working and learning convention, and it is a time for physicians' wives to renew past friendships. We do hope to increase our attendance year after year, but we are very pleased with the change and the acceptance of it.

The AMA-ERF Chairman presented \$13,557.03 to a representative from the University of Kentucky College of Medicine, and \$15,531.08 to a representative from the University of Louisville School of Medicine. The McDowell House Chairman paid a tribute to Dorothy Belle Hill, Director of the McDowell House for the past fourteen years. Doctor Carl Cooper, President of the Kentucky Medical Association, was the guest speaker at the convention luncheon. Mrs. Manuel Bergnes, President of the AMA Auxiliary, spoke to the House of Delegates and installed the officers for 1979-1980—their theme for the coming year is "WE CARE."

As I made visits to our 29 counties throughout the year, I challenged them to "grow"—in membership, in health projects, in respect and acceptance of each other—to promote mutual understanding among physicians' families. We grew in membership; a total of 1,486 members, which is an increase over last year of 94 members, which is the highest our membership has been in the last ten years.

In November we gained a new auxiliary, Wayne County. The counties have participated in 98 health projects, the most popular being CPR. In the varied health programs the counties have involved or contacted 13 private agencies and 9 government agencies. They have loaned a total of \$8,550 for college loan funds, and have given a total of \$10,000 in scholarships. The state auxiliary gave \$5,000 in loans to five allied health students. The counties gave a total of \$3,113.21 to McDowell House Refurbishing Fund. As of this writing, the counties have donated \$22,500 to AMA-ERF, a \$5,000 increase over last year. The counties met my challenge in many other ways, and I am very proud of them.

The Leadership Conference was held in historic Shakertown in late August. There were 90 members in attendance to learn how various projects and programs could be used in their own auxiliaries. The Auxiliary Day at McDowell House in October served a two-fold purpose: saying good-bye to Dorothy Belle Hill, the director for 14 years, and greeting Susan Nimocks, the new director.

The fall Board meeting was held in conjunction with the KMA Convention at the Hyatt Regency Hotel in Lexington. It was especially fun for those around the state who had not been to the new Convention Center facility and Fayette County was delighted to be the host.

Five county Presidents-Elect and the state President-Elect and state President attended the National Confluence in Chi-

cago. It was a very valuable learning program. A packet was made up for each county president with information on a variety of subjects, plus an order form to receive tapes on each program presented. The state President, President-Elect and the President-Elect Nominee attended the Southern Regional National Auxiliary meeting in Atlanta in February. It was an informative program for state officers in preparing for their coming year as leaders in their state. Six delegates, including the AKMA President and the Immediate Past President, represented Kentucky at the AMA Auxiliary Convention in Chicago in July.

We appreciate the support of the Kentucky Medical Association. The entire staff is a delight to work with. We especially appreciate the office space and secretary provided for our use; the printing facilities; being asked to serve on committees and, hopefully, in the future we will be asked to serve on more committees and in more areas, which would be helpful and beneficial to KMA. It was a very interesting and challenging year; I am very proud to have served in the capacity of State President of the Auxiliary to the Kentucky Medical Association.

Mrs. Charles Nicholson, President

## Report of the President-Elect

This year as President-Elect has been a rather easy one for me since I have had the opportunity to rely heavily on the great experience and personal friendship of Doctor Carl Cooper. We are all extremely fortunate to have men of his caliber who have devoted so much time and interest to organized medicine.

It is with organized medicine that we must continue to resist the socialistic trend of bureaucratic government that seems to attack us from all sides, and in every conceivable manner.

Doctor Cooper, throughout his year, has carried the banner of the Voluntary Effort of cost containment in medicine. Largely through his efforts statewide there has been significant contribution to this cause, on the part of individual physicians and the hospitals they serve. This program, of course, must be continued with the same vigor throughout the coming year.

Doctor John Stewart first conceived the idea of the Kentucky Medical Insurance Company, and through his efforts, and those of Doctor Ballard Cassady, first President of Kentucky Medical Insurance Agency and Kentucky Medical Insurance Co., the plan was brought to fruition during the tenure of Doctor Carl Cooper. For these accomplishments, we are extremely grateful.

The coming year will be a Legislative one, and I can assure you that I intend to call upon all of the legislative talent that exists in our profession throughout the state for expertise and advice. We intend to work very closely, and perhaps on a day-to-day basis, with the specialty groups of our Association in order to solicit their thoughts concerning the various legislative activities that might affect the good practice of medicine.

We are very fortunate and have tremendous pride in having Doctor Hoyt Gardner as President of AMA. His leadership will be of great benefit, not only at the national level, but at our own state level, and we wish him well and pledge him our support.

I look forward to the coming year as your President, and pledge to you a year of hard work and devotion to the cause of the Kentucky Medical Association. There are problems ahead, similar to those we have previously faced, not only from

bureaucratic intrusion, but from other groups that will attempt to practice medicine through legislative decree rather than education. We have a very experienced staff under the able direction of Mr. Robert Cox, and I look forward to serving with them. With their help and yours, and through a responsible public, we are hoping to achieve the many goals set for 1980.

Robert S. Howell, M.D., President-Elect

## Report of the Speaker and Vice Speaker of the House of Delegates

Your Speaker and Vice Speaker of the House of Delegates would like to take this opportunity to thank each of you for your support and cooperation during the past year.

As we go forward, your Speakers hope that unity and solidarity within the Association will continue to be our major strength and greatest hope.

The KMA staff continues to be outstanding and throughout the year provided help and assistance, and their efforts on our behalf have certainly made our job easier.

We have had difficulty in appointing reference committees due to the late reporting by county societies of the names of their Delegates and Alternates to the KMA. This report should be in by June of each year.

A new format for presentation of reference committee reports consistent with the AMA format was used at the 1978 Annual Convention, and was considered to be helpful in facilitating the flow of business. By action of the 1978 Convention, a Rules Committee was established, and it is sincerely hoped that recommendations of the Rules Committee will further help facilitate the flow of business at the 1978-1979 Annual Convention. These matters will be brought to the attention of the House of Delegates at the first session of the House for their consideration.

We thank you sincerely for the opportunity to serve.

Bennett L. Crowder, II, M.D., Speaker

Peter C. Campbell, Jr., M.D., Vice Speaker

## Report of the Chairman of the Board of Trustees

### Introduction

This past Associational year has produced increased activity, demonstrated progress, achieved accomplishments, and opened new doors for the Kentucky Medical Association. During a non-legislative year for Kentucky, one would think the pace would slacken, but that never seems to happen.

On June 1, the Kentucky Medical Insurance Company was capitalized; an achievement we can all share with pride. Our appreciation is extended to every member who had a role in the formation of KMIC. It is now time for the profession to fully support the company which was formed at the request of the House of Delegates to help us control our destiny and to insure that a strong professional liability insurance company will be around in the future to serve our needs. I feel the company, owned and operated by Kentucky physicians, is already benefiting every doctor in the state. It exists to serve each of us and it behooves each of us to fully support this entity uniquely designed for our needs.

We have worked closely with national legislative matters this year, keeping track of legislation, corresponding, telephoning, and visiting with our Congressional Delegation. At the same



time we have been preparing for the 1980 Kentucky General Assembly and monitoring the Interim Committee system.

President Cooper has had health care costs restraint as a priority this year, and this theme has spilled over into many of our activities. KMA has been a sponsor and active participant in the statewide Voluntary Effort Steering Committee. Doctor Cooper has spoken at most district meetings on this subject, and I feel we are making strides in demonstrating that quality care can be provided in a cost-restrained atmosphere through the voluntary concept.

KMA has another first in its history with the installation of a mini-computer in the Spring of this year. It will serve many purposes for the Association in its efforts to better serve the membership. The computer's versatility in data and word processing brings new dimensions to the administration of KMA activities.

The Legal Trust Fund resolution passed by the House of Delegates last year requested that I report on its status this year, and I am pleased to do so. During the current Associational year, the Trustees of the Fund authorized expenditures in the amount of \$6,872.56. This leaves a balance in the Legal Trust Fund of \$48,605.85.

There follows a summary of the meetings and activities of the Board for the year.

#### *Summary of Board Meetings*

##### **First Meeting, September 28, 1978**

Acting as temporary Chairman, KMA Secretary-Treasurer, S. Randolph Scheen, M.D., introduced the newly elected members of the Board of Trustees and the new officers: Harold L. Bushey, M.D., Barbourville, Vice President; Walter S. Coe, M.D., Louisville, Trustee, Fifth District; Richard F. Hench, M.D., Lexington, Trustee, Tenth District; and Donald C. Barton, M.D., Corbin, Trustee, Fifteenth District.

The Board then elected the Executive Committee members to serve with the president, President-Elect, Vice President, and Secretary-Treasurer for the 1978-79 Associational year. Chosen as Board Chairman was William T. Watkins, M.D., Somerset; and Vice Chairman, Dwight L. Blackburn, M.D., Berea. Earl P. Oliver, M.D., Scottsville, and Richard F. Hench, M.D., Lexington, were also named to the Executive Committee.

Elected to serve on the Board of Directors of the Kentucky Foundation for Medical Care were Charles B. Spalding, M.D., Bardstown; Harvey A. Page, M.D., Pikeville; Bob M. Deweese, M.D., Louisville; and Allen E. Grimes, M.D., Lexington.

Elected to the KEMPAC Board were James S. Brashear, M.D., Central City, First District; Steve Z. Smith, M.D., Louisville, Third District; Thomas A. Watson, M.D., Louisville, Fourth District; and Stephen T. Jasper, M.D., Somerset, Fifth District.

The Board reviewed the Executive Committee's recommendations for committee personnel, made appropriate changes and additions, following which committee membership for the 1978-79 Associational year was approved.

It was taken by consent that the 1979 Annual Meeting would be held in Louisville at the Ramada Inn/Bluegrass Convention Center in keeping with a previous commitment, unless extenuating circumstances require a change in site. The Board will make its final commitment in December for the location of the 1979 Annual Meeting.

Before adjourning, the Chairman set the date of the next

Board of Trustees' Meeting as December 13-14, 1978, at the KMA Headquarters Office in Louisville.

##### **Second Meeting, December 13-14, 1978**

The second meeting of the KMA Board of Trustees was held on Wednesday evening and Thursday morning, December 13-14, 1978.

President Cooper presented an extensive report on his activities during the Associational year, followed by reports relating to the Headquarters Office and KMA's financial status. Additional reports were presented pertaining to the Board of Medical Licensure, and Senior AMA Delegate, David B. Stevens, M.D., gave a thorough explanation of the activities that took place during the AMA Convention held in Chicago earlier in the month.

Several committee chairmen were in attendance to present reports to the Board and specific action was taken on matters relating to the Committee on Physicians' Health, Ad Hoc Committee on Hospital-Based Specialists, Membership and Placement Services Committee, and the KMA-KNA Joint Practice Committee. Nominations were made for submission to the Governor of a number of physicians for service on Governor-appointed councils and committees.

Seventh District Trustee, William H. Keller, M.D., discussed a ruling of the Federal Drug Administration pertaining to oxytocin and a plan of action was outlined. Legal Counsel then reported on a number of legal matters currently having an impact on KMA, and also reported that physician contributions to the state Patients' Compensation Fund should be returned in early Spring of 1979. Three specific lawsuits were reviewed and funds authorized from the KMA Legal Trust Fund for payment of bills.

A full report was submitted to the Board of Trustees concerning actions of the October Executive Committee which were taken to implement actions of the House of Delegates. The Board referred to background material outlining these plans and commented as indicated. Specifically, the Board took action to appoint a committee to implement Resolutions L and Q passed by the 1978 House of Delegates pertaining to 1) participating and non-participating agreements, and 2) primary care reimbursement. In other action the Board adopted a statement concerning second opinions at the request of the Jefferson County Medical Society, and following a presentation by the Committee on Health Care Costs' Chairman, Walter I. Hume, Jr., M.D., referred detailed recommendations of the committee to a subcommittee of the Board for study and to report back to the Board of Trustees.

The Board also accepted a recommendation of the Executive Committee for KMA to purchase a mini-computer system as outlined in a booklet presented to the Board. The system is expected to be installed at KMA in the Spring of 1979.

Doctor Cooper then discussed state legislative activities followed by a national legislative activity report by Fred C. Rainey, M.D.

The Board voted to hold the 1979 Annual Meeting at the Ramada Inn/Bluegrass Convention Center in Louisville, endorsed a Jaycee Program concerning training individuals in cardiopulmonary resuscitation, accepted a Blue Cross and Blue Shield presentation concerning KMA's health insurance program, and took action relating to HEW regulations involving hospitals that had received Hill-Burton funds.

A highlight of the Thursday morning session was a presentation by Ballard W. Cassady, M.D., President and Chairman



of the Board of the Kentucky Medical Insurance Company, supplemented by a report for KMIC's Executive Vice President, Mr. Riley Lassiter.

The Board adjourned after it had set the date of its next meeting for April 4-5, 1979.

### **Third Meeting, April 4-5, 1979**

The third meeting of the Board of Trustees during the Associational year was held on April 4-5, 1979, at the KMA Headquarters Office in Louisville.

President Cooper reported on his activities and meetings he had attended representing the Association. Of major importance was the commitment being made by KMA, the Kentucky Hospital Association, and Blue Cross and Blue Shield of Kentucky to the Kentucky Voluntary Effort. Mr. Avil L. McKinnel, Executive Vice President of Kentucky Blue Cross and Blue Shield, related the activities of his organization regarding the Medical Necessity Project, whereby Blue Cross and Blue Shield was trying to phase out certain routine medical and laboratory procedures which over time had proven to be most often unnecessary or inefficient. This effort is part of a national program with significant input from affected medical specialty groups.

AMA President-Elect, Hoyt D. Gardner, M.D., reported an increase in AMA membership over last year. On another subject, Doctor Gardner summarized the many areas of legal involvement in which the AMA was presently active. He indicated AMA's commitment to full protection of the membership through the legal process.

Stanley Hammons, M.D., Chief Medical Officer of the Department for Human Resources, was in attendance and reported on several state government programs in progress in the areas of health planning, health manpower, data collection, and others.

On committee matters, the Board noted establishment of a Rules Committee, approved guidelines adopted by an ad hoc committee on the definition of a physician's office for purposes of Certificate of Need, approved the establishment of a "KMA Educational Achievement Award" for an individual making an outstanding contribution to medical education, and heard reports on legislative activities from both the State and National committees.

Nominations were approved for submission to the Governor's Office for the Radiation Advisory Committee, Board of Nursing Education and Nurse Registration; Certificate of Need and Licensure Board; Board of Medical Licensure; and the Kentucky Drug Formulary Council.

Ballard W. Cassady, M.D., President of the Kentucky Medical Insurance Company, advised the Board that capitalization should soon be realized and that funds totaling over one million dollars had been collected from stock purchase. However, it is extremely important that all members continue to be encouraged to purchase stock as well as liability coverage from the Kentucky Medical Insurance Company.

Prior to adjournment, the Chairman announced that the next meeting of the KMA Board of Trustees would be held August 8-9, 1979.

### **Fourth Meeting, August 8-9, 1979**

The Board met for the fourth time of the year on August 8-9 in Louisville. One of the main purposes of the meeting was to review reports from committees and resolutions to be submitted to the House of Delegates.

The Commissioner for Health Services, Robert Slaton, met with the Board and discussed health activities occurring at the national level, which included exemptions for HMO's under Certificate of Need, Federal funding of primary care centers, and centralized control of health planning.

Doctor Frank Gaines, Secretary of the Board of Medical Licensure, reported that the licensure examination had been recently completed which resulted in 642 new licenses. In addition, there are now 218 temporary permits and 4,512 total physicians registered in the state. A good bit of the Board's activities this year have been directed to certifying paramedics and athletic trainers which were a result of state legislation passed in 1978. The Board has also been occupied in an advisory capacity to the Board of Nursing Examiners in developing regulations.

Senior AMA Delegates, David B. Stevens, M.D., reported on the July AMA meeting. It was noted that the AMA House considered proposed changes to the Principles of Medical Ethics, which have been referred to all state medical associations for review. These changes related to suits initiated by chiropractors who had contended that physicians were involved in restraint of trade because of a lack of any relationships with chiropractors. Doctor Stevens also commented on AMA membership and urged any activities that would increase it.

A presentation of bound *KMA Journals* for 1977-78 was made to the Immediate Past President, John P. Stewart, M.D., in recognition of his service.

In the area of continuing medical education, it was noted that the AMA House of Delegates voted to withdraw participation in the Liaison Committee on Continuing Medical Education, and the AMA would now stand as the sole accrediting authority for physician CME.

Information was received on the Kentucky Medical Insurance Company. Since the beginning of operation as KMIC, the Company has sold coverage to 200 physicians. The stability of the Company is assured because of the large percentage of coverage reinsurance. It was noted that the KMIC stock holders would have their first meeting on Thursday, September 27, following the reorganizational meeting of the Board.

The next meeting of the Board was set for Sunday, September 23, at the Ramada Inn, and the meeting was adjourned.

### *Executive Committee*

An eight-member Executive Committee, a mixture of officers and trustees, meets between sessions of the Board to facilitate the day-to-day operations of KMA. It devotes much time to the Association and makes itself available on short notice.

This year the Executive Committee has met six times to act on a wide variety of subjects, taking specific action on those indicated and making recommendations to the full Board when time permits and/or the nature of the subject dictates. The members of the Executive Committee maintain close liaison with the committee structure within KMA.

Four officers from the Executive Committee comprise the Quick Action Committee, the President, President-Elect, Board Chairman, and Secretary-Treasurer. The Quick Action Committee is "on call" to make on-the-spot decisions when the Headquarters Office is called upon to furnish a quick statement of policy or to take some immediate action on matters which seem to surface urgently.

### *Ad Hoc Committees*

This year ad hoc committees were appointed: 1) on Hospital-Based Specialists, which established guidelines for separate billing procedures; 2) on Physicians' Offices, which established guidelines for the definition of a physician's office as relates to certificate of need; and 3) to study the Report of the KMA Commission on Health Care Costs, which is presented in full as Special Report A.

Copies of the complete reports on Hospital-Based Specialists and Physicians' Offices are being made available to Reference Committee 1 for anyone who may wish a copy.

Separate reports are being filed for the Ad Hoc Committee of the House on Insurance Procedures and Primary Care Reimbursement (Resolutions L and Q, 1978), and Special Report B on Continuing Medical Education Records. The report of the Rules Committee is also being presented separately.

It has been my privilege to serve as Chairman of the Board this year. My thanks is most sincerely extended to all the officers and Board members for their help and dedication, and to the many other members who have worked so long and well for our Association.

William T. Watkins, M.D., Chairman, Board of Trustees

## **Report of the Secretary-Treasurer**

It is gratifying to look back on another year of accomplishment by our Association. A good bit of this accomplishment is evidenced by the reports that are being presented to the House of Delegates and other discussions that will be heard. So much of what KMA does, though, is never listed or reported and can only be identified through observation of the day-to-day activities from our Headquarters Office.

The committee reports, which bring to us in very abbreviated form some of the things that the Association is routinely involved in, don't present a true picture of all the effort that goes into a single committee meeting. In addition to all the committee work, efforts equal in volume and sometimes more urgent are carried on by the officers and staff as daily routine.

Likewise, the miles traveled by KMA representatives and hours spent on over-seeing and protecting the myriad details that are required to defend and further our professional Association still don't give a true picture of KMA.

Each year the membership is advised that the workload has increased (if possible) over the previous year. It has. From time to time it has been reported that KMA may be represented on any given day at as many as 10 meetings held in such disparate locations as Chicago and Bowling Green. This still holds true. Each year it seems like there is another major confrontation for medicine from governmental agencies, the Legislature, allied associations and other groups, and this is true, again, this year. While tangible results and even notable successes aren't always easily measured, it's reassuring to know that KMA is at work; it's active and it's effective.

At the national level, we were honored to have Hoyt Gardner, M.D., inaugurated as President of the AMA in July. He will serve along with his wife, Rose, who was elected as Treasurer of the AMA Auxiliary.

Another achievement this year was the fact that our own physician-controlled professional liability insurance company, KMIC, was capitalized and is now operating on our behalf. Capitalization was achieved on June 1, when the capital requirement of 1.24 million dollars was met, and, since that date,

KMIC has sold its own policies. The impact on the insurance market has been notable.

After a number of years of study and investigation, computerization has come to the Headquarters Office. This enhancement of our technical capabilities will result in more efficient operation and effective control of physician-related information; again, within our own professional Association.

In addition to making the day-to-day activities of KMA more efficient, the computer capability can serve as an information and service source for medical specialty groups, on request.

From the standpoint of unity, the KMA Headquarters now houses 10 separate corporations or subsidiary corporate interests, all working in the interests of the membership, which range from the insurance company to the Rural Kentucky Medical Scholarship Fund.

Considering all these activities, the costs for building and grounds maintenance and regular equipment and supplies, not to mention the eroding effects of inflation that everyone is familiar with, it's a pleasure to report that KMA's financial base remains sound. Our solvency up to this point is due in large part to the frugality of our operation and a vigilance for identifying and implementing cost savings. Our economic future cannot be guaranteed in the present inflationary climate, but we have maintained our present status admirably.

My service to the Association and the membership continues to be a privilege and honor, and I appreciate the trust I have been awarded. Sincere and personal thanks to the officers and Board members with whom I have had the pleasure to serve, as well as the individual members who have helped to make my job easier and rewarding.

S. Randolph Scheen, M.D., Secretary-Treasurer

## **Report of the Editor**

The Board of Editors which meets monthly at 7:30 a.m., considers numerous scientific and clinical articles for publication in the *Journal*. Additional discussion is held on format changes and new editorial policy.

The policy changes the Editors have been discussing over the past year deal with the reformation the *Journal's* interior is undergoing. This has been mentioned in the past, but due to a staff changeover in the *Journal* Department, all the changes we had anticipated were not realized. We would like to welcome Mrs. Donna Young as our new Assistant Managing Editor and look forward to utilizing her journalistic expertise.

One of the changes that the membership might have noticed is the use of more photographs in the organizational section. More photographs will be taken at meetings and events in the future and reported in the *Journal* to keep the membership informed of the activities going on in the State. Another innovation is the use of art work for various ads in promoting the KMA Annual Meeting and other activities. If this new procedure seems to provide beneficial results it will be expanded upon.

To increase the editorial scope, the Regional Editors, who were appointed last year, are now encouraged to write editorials of their choosing, but are specifically being encouraged to write on matters concerning their areas. The Board feels that the *Journal* should provide adequate communications, and we encourage the membership to use the "Letters to the Editor" section to express their opinions.

We hope the changes the Editorial Board employs will meet with the approval of the membership. We welcome membership



comments and invite any physician to submit original unpublished scientific papers for consideration and publication.

I personally want to thank the Editors for their attendance at the monthly meetings of the Board and convey a very special thanks to the Scientific Editor, Paul C. Grider, Jr., M.D.

The Editorial Board will continue to administer its charge in keeping the *Journal* of the KMA a quality publication and maintain it as a vital link in keeping the physicians of Kentucky informed.

A. Evan Overstreet, M.D., Editor

## Report of the Delegates to AMA

1978-79 was a very good year for the KMA and the American Medical Association. Hoyt D. Gardner, M.D., Louisville surgeon, was inaugurated as the 134th President of the AMA. In a memorable two and one-half hour ceremony, unparalleled in recent AMA history, Doctor Gardner entertained the audience with his choice of the Stephen Foster Singers from Bardstown, Kentucky, and Chet Atkins at the guitar. Doctor Gardner then introduced to the audience all who had helped him in the campaign. His epic remarks pointed out the dangers of advancing science and the moral decisions with which society will be confronted.

Representing the KMA again this year were Delegates David B. Stevens (Lexington), Fred C. Rainey (Elizabethtown) and Harold D. Haller (Louisville). Alternate delegates were Lee C. Hess (Florence), Kenneth P. Crawford (Louisville) and Wally O. Montgomery (Paducah). Carl Cooper (Bedford), President of the KMA, was present at both sessions.

The House of Delegates, now about 270 strong, met twice in the past Associational year, both times in Chicago. At the December, 1978 meeting main items related to National Health Insurance and chiropractic as it relates to the Code of Ethics. The House reversed its previous stand regarding national health insurance, rejecting the long-held AMA policy supporting "Medicredit," and voted to support no national health legislation. It adopted Resolution 62 of Florida, which made permissible AMA support of so-called "catastrophic legislation" if Congressional events portended need for strategic support.

The AMA, which vigorously opposed the practice of chiropractic before 1972, when U.S. Congress included chiropractic as a benefit under Medicare, has been sued for interstate restraint of trade by five chiropractors in the Wilkes vs. AMA, et al. Also, several other suits with AMA as co-defendant seeking to establish chiropractic rights to laboratory services, have been filed in the U.S.

The North Penn. Hospital suit in Pennsylvania was the subject of a heated conflict at the House of Delegates between the AMA and the radiologists, orthopedists, College of Physicians and College of Surgeons. The AMA and the Pennsylvania Medical Society, on advice of outside Counsel Newton Minow, wished to settle, but other parties, some in suit and some not, thought fundamental principles enumerated in the Code of Ethics would be violated, and settlement should not be made. The House of Delegates supported the Board and the suit was subsequently settled. AMA Board and Delegates believed the fundamental issues would be addressed in the Wilkes vs. AMA case, and that efforts at defense should be concentrated in this action.

The July 22-26, 1979 meeting of the 274 Delegates was again held in Chicago, Ill. Besides the unforgettable inaugura-

tion of Hoyt D. Gardner as President, David B. Stevens ran unsuccessfully against five others for two spots on the Council on Constitution and Bylaws; Lowell Steen (Indiana), John Coury (Michigan), Hubert Ritter (Missouri) and Frank Jirka (Illinois) were re-elected to the Board of Trustees; Jack Lewis (Ohio) was elected to a partial term on the Board to fill the seat of Robert Hunter of Sedro Woolley (Washington) elected to President-Elect by acclamation. Carroll Witten, a Louisville physician, retired from AMA service after completing his final term on the Council on Constitution and Bylaws. William A. Sodeman, Sr., M.D., was given the AMA Distinguished Service Award.

Issues included clarification of AMA policy regarding national health legislation. The House approved Board reports, permitting voluntary catastrophic coverage offered by employers and improvements in Medicare and Medicaid. The Delegates passed a moratorium on representation in the House of Delegates for new national medical specialty societies until procedures can be reviewed.

The new draft of Medical Ethics as proposed by the Ad Hoc Committee, Chaired by Jim Todd of New Jersey, will be distributed to all constituent societies for review and comment before reconsideration at the 1979 meeting (Attached). Related to this was the adoption of a new policy statement on chiropractic permitting professional associations and each individual physician to decide in light of his own circumstances (Attached). The House also stopped participation in the Liaison Committee for Continuing Medical Education and will revert to previous AMA accreditation procedures for CME.

AMA Delegates and Officers believe the AMA is the only organization that can speak as a collective voice for the Medical profession. The AMA financial situation is now secure and dues will remain at \$250 per annum, but by 1981, if inflation continues, expenses will again exceed revenue; either dues will rise or programs will be cut, unless membership can be increased. For the last several years the number of active members has been the same, so the potential pool of new members goes up by 14,000 per year. This, to me, is the greatest problem confronting the AMA as a viable, strong, representative Association.

Whatever success the KMA Delegation to the AMA has enjoyed, it would not be possible without Bob Cox, Bill Applegate, Bob Klinglesmith, Joe Witherington, and Don Chasteen. All the delegation are grateful to them for their cheerful, expert and intelligent services.

David B. Stevens, M.D., Senior Delegate to AMA

### RECOMMENDATIONS

1. Review and establish KMA's position on the proposed AMA Medical Ethics for the AMA delegation.
2. Review for information the new AMA policy with regard to limited license practitioners.

## Report of the Executive Vice President

This is my twelfth annual report to the House of Delegates. It routinely deals with a summary of administrative matters of the Association, but I would be remiss not to point out that the creativity of the Headquarters staff is only alluded to in the reports of the various committees under consideration by the House of Delegates. It is a continuing pleasure for me to work closely with all staff members, who incidentally have accumu-



lated over 125 years of experience in their service to the Association.

Some of staff's day-to-day activities include the servicing of KMA committees, working with the Executive Committee, Board of Trustees, ancillary groups and boards, and year-round preparation for the Annual Meeting.

The state and national legislative process continues to demand a significant amount of staff effort. The introduction of the Interim Committee system of the Kentucky General Assembly and the much increased activity of state administrative agencies has added a new dimension to staff's responsibilities even in "non-legislative" years as 1979.

We were pleased to welcome Don Chasteen, Director of Public Affairs and our chief lobbyist, back to the KMA staff. Don spent one year on temporary duty with the Kentucky Medical Insurance Company to help get KMIC off to an excellent start.

Governmental medical programs have been active and the Voluntary Effort on Health Care Costs has also required considerable attention.

County and district meetings, regional meetings, national seminars, planning our own one and two-day workshops, and attendance at the AMA Convention and other AMA meetings is a part of our daily routine. The continuing education of the medical association executive is much more formal today than in years gone by, and participation in such sessions is essential.

This year, the Board of Trustees authorized the purchase of a computerized data/word processor. The challenge of applying computer technology to KMA, equipment selection and purchasing decisions, and staff effort to make it operational this year was significant. We feel the effort will be more than justified in the expanded services we can perform for the membership.

There are new challenges on the horizon, such as the possibility of expanding services for specialty groups so that KMA can better fulfill its role as the umbrella for the medical profession in Kentucky.

#### **Headquarters Office**

The original KMA building was completed in 1961. Its size was doubled with an addition in 1972. The second floor on one wing was left unoccupied for future growth. The Kentucky Medical Insurance Company and Board of Medical Licensure now occupy that space, and we once again see the Headquarters building near capacity. At the same time, we find a need for additional staff. Such growth reflects increased services and responsibilities of KMA to the membership.

#### **Finances**

This year marks the end of our current five-year dues plan. It was to have been at this Annual Meeting that Delegates would be asked to vote on an increase in dues. The rate of inflation over the past five years has been double that predicted when the current dues schedule was adopted; yet with careful planning in every department and operating under the cost-conscious eyes of the Board and Budget Committee, we find KMA with a sound financial status that does not mandate a dues increase request this year. However, pressure may not let us delay consideration of some adjustment in the dues structure next year. With inflation running rampant and energy costs skyrocketing, it is not hard to understand the economic pressure on the Headquarters Office which is faced by every business today.

#### **Membership**

Membership in KMA continues to increase and is again at an all-time high. Much of this is due to an aggressive recruitment program designed to reach those physicians practicing today who have never been asked to join organized medicine. Through the combined efforts of county officers and the appropriate use of our computer, we are hopeful we can increase our ability to offer membership benefits to all eligible Kentucky physicians.

KMA now bills directly to collect dues from all counties except five. This billing procedure has added to our membership rolls and allows both KMA and county societies to receive dues more rapidly than in the past. KMA immediately sends county dues collected to county society secretaries. We feel this arrangement has been beneficial both to the county societies and to KMA.

As of July 31, 1979, KMA had 2,939 regular dues paying members, and 502 in other categories, for a total membership of 3,441.

#### **Planning**

Adequate and careful planning is a basic principle of good business that staff tries to practice. The executive staff meets with KMA's new officers early in the Associational year to debrief the year just completed and plan for the year ahead. Additionally, long-range plans are reviewed to meet the changing desires to the membership and the changes in climate in the practice of medicine. All of these plans are then reviewed, embellished, and altered as needed at routine meetings of the executive staff every Monday morning.

#### **Summary**

I have not attempted to provide you with any collection of data or details of the Headquarters' Office operation. I will be in attendance to answer any questions of the Reference Committee. Additionally, I will provide the Reference Committee with a list of meetings that staff has attended, either to represent KMA or to work within the organizational structure of KMA, during this past Associational year.

It is a pleasure to work with the entire staff. On behalf of all of us who work for Kentucky physicians, a special thanks goes to our Board members, committee chairmen, and officers with whom we have the most frequent contact. They give unselfishly of their time and are most helpful to staff in carrying out our assigned duties.

Robert G. Cox, Executive Vice President

### **Report of the Advisory Committee to the KMA Auxiliary**

The Advisory Committee to the KMA Auxiliary is pleased to report to the membership the outstanding contributions the Auxiliary provides in areas of human development and understanding, not only to the medical profession, but to the State and local communities.

Their contributions to local communities in areas of the handicapped, rape crisis centers, child abuse and drug programs often go unnoticed. We commend the Auxiliary for its unselfish devotion and continuing work in areas of people-oriented problems requiring sacrifices in terms of hours away from their families and personal financial involvement.

As its major program statewide, the Auxiliary has continued to work toward and collect funds for the AMA Education and Research Foundation. These funds are distributed annually to the University of Kentucky and the University of Louisville medical schools. Funds raised this year again exceeded all existing records which indicates the outstanding leadership and participation by its members.

We urge all spouses of KMA members to join and participate in the activities of this group which provides so many vital services to Kentucky communities. The pride, determination and service of Auxiliary members to their State and this Association are deeply appreciated and serve as an example to all of us.

Paul J. Parks, M.D., Chairman

## Report of the County Society Presidents' Advisory Committee

The purpose for which this Committee was appointed was initially addressed in a seminar held in 1977 for elected officers of all county medical societies. While the reason for the Committee's appointment is commendable, to provide a routine channel of communications between county society leaderships and KMA, it is felt that sufficient channels are available through routine KMA activities. Representation is provided through the Delegates, through the District Trustees, through the Board of Trustees meeting as a group, and through individual officers.

Excepting a reaction or request from county medical societies to the contrary, it is the feeling that this Committee should be disbanded until a further need is seen.

Carl Cooper, Jr., M.D., Chairman

### RECOMMENDATIONS

1. The County Society Presidents' Advisory Committee should be disbanded unless further need is seen.

#### Recommendations, Reference Committee No. 1

Mr. Speaker, I request the privilege of the floor to make several communications which have grown out of Reference Committee No. 1's consideration of the above reports.

From the testimony given in open hearing and from the Committee's review of the Reports of the Officers of the Association, it is obvious that this organization is blessed with dedicated servants in its official leadership positions.

We would specifically like to commend President Carl Cooper, M.D., for his year of dedicated service to the Association and particularly for his efforts in the successful capitalization of the Kentucky Medical Insurance Company.

We would like also to commend Mrs. Charles Nicholson, President of the KMA Auxiliary, for her service as head of this important organization whose membership has reached a new high and whose community efforts are expanding.

The Committee makes special note of the many hours of dedicated service given by the Secretary-Treasurer, S. Randolph Scheen, M.D.

We also thank the AMA Delegates for their dedicated services and highly commend them for their efforts in the election of Hoyt D. Gardner, M.D., as President of AMA.

The Executive Vice President, Mr. Robert G. Cox, is to be commended for overcoming tremendous economic pressures in

holding down expenses of the Association; thus, requiring no dues increase this year.

Finally, the Committee would like to commend the Speaker and Vice Speaker of the House for their efforts in streamlining and facilitating the flow of business of this august body.

### ITEMS FOR CONSENT

Reference Committee No. 1 reviewed the following items and recommends that they be adopted or filed as indicated, by the consent of the House, without discussion:

1. Report of the President—filed
2. Report of the President, Auxiliary to KMA—filed
3. Report of the President-Elect—filed
4. Report of the Speaker and Vice Speaker of the House—filed
5. Report of the Chairman, Board of Trustees, **except** Special Report A—Report of the Ad Hoc Committee on Health Care Costs, and Special Report B—Continuing Medical Education records—filed
6. Report of the Secretary-Treasurer—filed
7. Report of the Editor—filed
8. Report of the Delegates to AMA, **except** Report UU (AMA Board of Trustees), and Report of the AMA Ad Hoc Committee on the Principles of Medical Ethics—filed
9. Report of the Executive Vice President—filed
30. Report of the Advisory Committee to the KMA Auxiliary—filed
36. Report of the County Society Presidents' Advisory Committee—adopted

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 1 as a whole. (The motion was seconded and carried.)

Mr. Speaker, as Chairman of Reference Committee No. 1, I would like to express my thanks to each of the Committee members, W. E. Becknell, M.D.; R. Kendall Brown, M.D.; Willis P. McKee, M.D.; and Carroll H. Robie, M.D., for their help in preparing this report.

### REFERENCE COMMITTEE NO. 1

Donald R. Neel, M.D., Owensboro, Chairman  
W. E. Becknell, M.D., Manchester  
R. Kendall Brown, M.D., Georgetown  
Willis P. McKee, M.D., Shelbyville  
Carroll H. Robie, M.D., Louisville

## REFERENCE COMMITTEE NO. 2

Edwin J. Nighbert, M.D., Lexington  
Chairman

Reference Committee No. 2 considered the following reports and Resolution:

13. Report of the Scientific Program Committee
14. Report of the Scientific Exhibits Committee
15. Report of the Continuing Medical Education Committee
16. Report of the Cancer Committee
19. Report of the Hospital Committee
33. Report of the Emergency Medical Care Committee
37. Report of the Interspecialty Council



5. Report of the Chairman, Board of Trustees; Special Report B—Continuing Medical Education Records, **only**

Resolution A—Inappropriate Requirements for Staff Membership (Daviss County Medical Society)

Reference Committee No. 2 reviewed the following reports and recommends they be adopted or filed, by the consent of the House, without discussion:

## **Report of the Scientific Program Committee**

The KMA Scientific Program Committee met this year in October to begin planning the Scientific Program for the KMA Annual Meeting. A second meeting was held April 26. In addition, your Chairman met with the Presidents of the 21 specialty groups participating in the Annual Session to discuss their part in planning the Scientific Session. The scientific programs of the specialty groups held in conjunction with our General Session have proven time and again to be valuable and, we feel, provide an excellent contribution to the continuing medical education of the membership.

I am extremely grateful for excellent cooperation in planning the overall Meeting that we have received from the specialty groups.

The Scientific Program this year will feature a mix of subjects of current interest and will include half-day sessions on themes, "Trauma," "Cancer," "The Biliary Tree," and "Recent Advances in Medical Practice." The Committee members and specialty groups have gone to great lengths to bring in some of the country's most outstanding speakers. We are proud of the fact that KMA's Annual Scientific Program continues to be one of the best state meetings in the country. It is accredited for continuing education by the American Medical Association, and several medical specialty societies.

The Committee visited the Ramada Inn/Bluegrass Convention Center and was favorably impressed by the expansion program under way. While there may be some inconveniences during this year's program with regard to parking and construction, the Committee still feels that overall, the Ramada Inn/Bluegrass Convention Center presents an excellent convention location, allowing us to hold the entire meeting at a single location.

As Chairman of the Scientific Program Committee, I am most appreciative of the efforts of those who assisted in the formation of this Program, particularly the Committee members, specialty group presidents, and specialty program chairman.

As always, suggestions from the membership for future programs are very welcome.

Stephen B. Kelley, M.D., Chairman

## **Report of the Scientific Exhibits Committee**

Due to the nature of the activities of the Scientific Exhibits Committee, all preparatory functions and decisions were adequately handled by correspondence and telephone. Scientific Exhibit applications were carefully reviewed by the Com-

mittee members, and those meeting the criteria established by previous policy were approved.

The 1979 meeting will return to Louisville, and, although we will not have as much space as we did in 1978, the allotted area will be adequate to meet the needs of the exhibitors. The exhibits will be located to provide the highest of visibility for the exhibitors and the participants.

We were extremely pleased with the 1978 Scientific Exhibits. The techniques promoted and the aesthetic quality, both in terms of teaching and eye-catching ability, provided the 1978 meeting an increased viewing and participating audience. Certificates of Achievement will again be presented during the 1979 meeting to those exhibitors displaying outstanding exhibits promoting the scientific advances and new teaching methods. We will also continue our program of presenting Certificates of Participation to each exhibitor for his participation and contributions to the overall success of the Annual Meeting.

The Scientific Exhibits section at the Annual Meeting will continue to play an important role in providing to the membership access to postgraduate physician education. The continuing interest and participation of exhibitors rely upon the encouragement and involvement of the membership in visiting and learning from these exhibits.

Richard A. Kiehl, M.D., Chairman

## **Report of the Continuing Medical Education Committee**

The Kentucky Medical Association was resurveyed at the 1978 Kentucky Medical Association Annual Meeting and the Committee is pleased to report that the Association's accreditation was extended for another four years.

The Liaison Committee on CME, the national parent accrediting organization, made several recommendations that they felt appropriate for KMA to follow to maintain our accreditation authority.

In the future all accreditation activities must be generated through the CME Committee. Those committee chairmen whose committees provide annual Category I seminars will be appointed as ex-officio members of the Committee as a means of providing more direct input in the development and implementation of the CME program. Our record keeping system should be reorganized to advise the membership of their CME credits. Steps have been taken to remedy this problem and it is anticipated in the future that the Association's new computer system will help organize CME records into a more useful format.

The Committee met four times during the past year and plans to meet at least quarterly next year. Upon receipt of the LCCME's report that continued the accreditation, the Committee set about setting up a new structure and formulating new goals. The Committee's membership now consists of a representative from the Kentucky Hospital Association, American Board of Specialty Societies, the States' two medical schools and State Board of Medical Licensure. This structure is in line with an early request made by the LCCME.

During this past year the Committee made four site visits: three were to new applicants and one was for renewal. There are also two additional institutions that are currently in the preparation state for accreditation site visits. The Louisville CME Consortium was approved for an additional four years



accreditation and the Owensboro-Daviess County Medical Society and Good Samaritan Hospital, Lexington, were granted two years provisional accreditation status. SS. Mary's & Elizabeth Hospital, Louisville, was granted one year provisional accreditation.

The Committee has reorganized its accreditation summary application and guidelines for completion of the application. It is hoped that these revisions, along with staff assistance and presite visit meetings with the institution's CME Committee will result in accreditation procedures that are more easily understood, as well as the intent of the program. These visits serve as learning events for the institutions and surveyors alike.

As Chairman, I had an opportunity to attend a meeting of the Liaison Committee on Continuing Medical Education in Chicago in June. The meeting was most beneficial in helping me to understand the intent of the LCCME and the procedures KMA's CME Committee must follow in assisting organizations to become accredited.

After attending this meeting, I feel the Committee is proceeding in the proper direction and should incur a minimal number of problems in evaluating medical societies and institutions for CME accreditation. The Committee has gone one step further than just acting as the reviewing agent for the LCCME by offering to meet with the requesting society prior to the site visit to insure that the appropriate procedures have been undertaken and the essentials for accreditation have been met.

The Committee felt it appropriate to restructure the Scientific Achievement Award from its present format. To more directly reflect the intent of the Award, the title was changed to the "Educational Achievement Award." The Award is now given to a citizen of the Commonwealth who has made a significant achievement in medical or medically related education in the areas of research, clinical application of medical practice, and/or patient education. The Award is to be presented annually. More than one recipient may receive the Award and it can be given to the same person more than once. Nominations are accepted from the deans and faculty of medical schools, county medical/specialty societies, and the general membership. As in the past, the Award will be presented during the first session of the House of Delegates at the Annual Meeting.

The Committee assigned a special Subcommittee on *Journal* Publications to solicit articles from the State's specialty societies for publication in the *KMA Journal*. The CME section of the *Journal* was designed to be a short, concise article, usually not exceeding one page, that deals with new developments in a specialty within the past one to two years. The membership and CME providers should be made aware of these articles. The Subcommittee encourages all specialty societies to actively participate in this program and hopes to be able to publish an article in the CME section at least every-other month.

The Committee, as part of its reorganization, invited Doctor Howard McQuarrie, President of the Utah Academy of CME to discuss his state's program with the Committee. Utah has a unique experience where all CME activities in the state are coordinated through one "academy." Doctor McQuarrie stated that there are several factors that make the Utah Academy work. They are: mandatory CME requirement for re-licensure, one medical school, good cooperation between the medical society and governmental agencies, (such as the PSRO), small

physician population and the relative location of the population as a whole in the state. He warned the Committee that such an operation may not work in other states. Their program is subsidized by an annual assessment of the Utah membership, and all recording of instruction taken, dissemination of courses and the development of future programs is administered through the Academy. The results of the discussion of the Committee with Doctor McQuarrie ended with the Committee designating a Subcommittee on Long Range Planning to develop formal guidelines for a comprehensive program of CME. The Utah Academy for CME's experience and other data obtained by the subcommittee over the next two years would be used to develop this new program.

Co-sponsorship has been a topic of concern to the Committee for some years now. Only recently did the Committee learn that they were entitled to co-sponsor CME programs with other institutions and societies. The LCCME has set down a particular set of guidelines that a sponsoring organization must follow to grant co-sponsorship. The procedures are very precise and require much cooperation on the part of the organization seeking co-sponsorship. A long term solution to this problem is needed and this will be considered by the Subcommittee on Long Range Planning. However, in the interim, the Committee will work to establish a tentative solution to this problem.

One immediate change the Committee will be initiating will be to hold quarterly meetings. Routine scheduled meetings will enable interested parties desiring CME accreditation an opportunity to meet with the Committee and discuss the procedures that must be followed in becoming accredited or obtaining co-sponsorship.

The CME Committee looks forward to again becoming active in the development and implementation of quality CME programming.

D. Vertrees Hollingsworth, M.D., Chairman

## ADDENDUM

The American Medical Association's House of Delegates, at their annual meeting in July, voted to immediately withdraw participation with the Liaison Committee on Continuing Medical Education. When originally written this report emphasized the steps the CME Committee had undertaken to come into compliance with the LCCME guidelines. Many factors contributed to the AMA's withdrawal from the LCCME, but the basic reason for their decision resulted from the desire of the AMA to return the CME accreditation process to the states. The subsequent withdrawal of the AMA from the LCCME and their recognition of the Kentucky Medical Association as an intrastate accrediting body has necessitated a revised accrediting format. The AMA now acts as the coordinating body.

The KMA Committee on CME will now be responsible for reviewing, and when acceptable, accrediting institutions in Kentucky. The KMA will be responsible to the AMA to insure that the programs we accredit meet the "Essentials for Accreditation." Representatives of the Committee will be meeting in Chicago with the AMA in October and with the LCCME during the winter to discuss the future goals the two organizations visualize. The Committee will continue to review the program changes initiated by the AMA and the LCCME and how their role as a national accrediting body affects KMA. We support the AMA and its CME policies and feel it is important to follow their lead.

Since the CME Committee now has the responsibility for the accrediting activities of the State, the Committee's membership has increased from 12 to 20. The additional members will assist the Committee in undertaking the anticipated accreditation site visit requests. The Committee will continue to seek input from the interested health care groups that were discussed in the original report. The Committee feels that these recent changes will be of assistance and will provide a more comprehensive program for the Association.

## Report of the Cancer Committee

The major objective of the Cancer Committee during the Associational year of 1978-79 has been its efforts to achieve additional grants for research and development allocated to the State of Kentucky.

The Committee became extremely concerned when statistics were presented showing Kentucky ranked 50th out of 51 states in funds allocated by the National Health Institute. The underlying problem in this area stems from the lack of representation of Kentuckians on the National Advisory Committees to the National Institute of Health. In April, 1979, the Committee presented a resolution to the KMA Board of Trustees expressing its concern and asked for the Board's assistance in improving Kentucky's position on the various boards. The KMA Board subsequently referred the resolution to the KMA National Legislative Activities Committee for its consideration and assistance.

Individual Committee members and others have contacted Kentucky's Senators and Congressmen expressing their concerns and the need for their active involvement in achieving a more equitable representation for Kentucky. Other contacts with State officials have also been made, and we have received invaluable assistance from those officials in this regard.

The Committee will continue monitoring the allocation of funds by NHI and will persist in its efforts to achieve a parity of representation for Kentucky on these national committees.

Other activities carried on by the Committee include providing articles to the Editorial Board of the *KMA Journal* for consideration. Also, the Committee has been very supportive of the activities of the Oncology Nurses Association in its objectives of assisting in the care of cancer patients and their families, particularly in the area of temporary lodging.

During the 1978 session of the Kentucky General Assembly, legislation was passed and funds were allocated to form the Kentucky Cancer Commission. The KMA Cancer Committee is pleased to have three of its members serving on this progressive and prestigious Commission. The Commission is presently in the developmental stages; however, during the coming years it expects to have a dramatic impact upon the research, treatment and management of cancer patients in Kentucky.

On behalf of the Committee, I wish to express my sincere appreciation to the membership for its continuing support of the activities of this Committee. I wish to thank all members of the Committee for their excellent support and involvement in assisting the Committee in the functions delegated to it by the KMA.

Ben F. Roach, M.D., Chairman

## Report of the Hospital Committee

The KMA Hospital Committee did not find it necessary to meet this year, but the members were kept apprised of current

areas of interest by mail. The dry-run accreditation visits continued to be held and we again are most appreciative to the members who participate in these programs.

The Committee continues to stand ready to be of service.

Royce D. Dawson, M.D., Chairman

## Report of the Emergency Medical Care Committee

Your Emergency Medical Care Committee met on January 3, 1979 to get a status report on Emergency Medical Services in the State of Kentucky and to plan the Ninth Annual KMA Emergency Medical Care Seminar, which the Committee presented June 6-7, 1979.

The Committee was brought up to date on Kentucky's MAST Program. We learned that the Program continues to serve the State as an inter-hospital air transfer system with basically the same amount of equipment and personnel as in the past. The Kentucky National Guard has also implemented a program in which pediatricians accompany sick children during the transfer. The air ambulance service in Kentucky is augmented by a ground neonatal intensive care unit operated by Norton-Children's Hospital.

A report on the progress of certification of paramedics in Kentucky was reported on. Legislation was passed in the 1978 Kentucky General Assembly establishing a certification program for paramedics which is now being administered by the Kentucky State Board of Medical Licensure. The Board has drafted regulations to implement the statutes and has appointed a Paramedic Advisory Committee.

The Committee also heard a report on the status of Kentucky's Emergency Medical Services Development. The State has a good basic ambulance system which has been developed over the past several years. We learned that much of the funding for these programs was obtained through the Comprehensive Employment Training Act (CETA), and that much of that funding was not renewed for 1979, which will cause problems in many parts of the State. Some alternatives now being considered include subscription-type services and the possibility of extensively restructuring the EMS System using volunteers similar to the setup of volunteer fire departments. The Committee also learned of efforts to establish a state-wide poison control center which we feel would be most useful in Kentucky.

This year, as in the past several years, the major effort of the Emergency Medical Care Committee was to plan and implement the Emergency Medical Care Seminar, which was held in Louisville in June. The goal of the Committee is to present an excellent continuing medical education opportunity for individuals interested in emergency medicine. The Program was again held in conjunction with the Kentucky Department for Human Resources, Bureau of Emergency Medical Services, EMS Conference. A record 510 people registered for the Meeting.

Two afternoons were devoted to the presentation of the Basic Life Support Program given by the American Red Cross. Those successfully completing the course are certified by the Red Cross in basic life support. The Committee is deeply indebted to the many volunteer instructors who participated in presenting the course. Response to that segment of the Program continues to be extremely favorable and we were pleased to have been able to make it a part of the Seminar.



We are indebted to the physicians from around the State who gave freely of their time to come and serve as faculty on the main part of the Program. There is no question that a program of this caliber would be almost impossible to present if physicians did not give so freely of their time. The small registration fee charged by the Committee covers the cost of meals and other promotional expenses and, hopefully, enables us to allow many people to attend a quality program for a small amount of money.

The Committee enthusiastically recommends that the Seminar be held again next year with the Emergency Medical Care Committee being the coordinating agency.

The members of the Committee have given a considerable amount of time and effort this year and I am very appreciative.

E. Truman Mays, M.D., Chairman

RECOMMENDATIONS

1. The Committee enthusiastically recommends that the Seminar be held again next year with the Emergency Medical Care Committee being the coordinating agency.

Special Report B

Board of Trustees (B-79)

The House of Delegates in 1976 adopted a position to support voluntary participation in CME, and KMA was directed to provide a mechanism for recording this participation. This year marks the third year that this record keeping system has been in effect. To obtain more concise information a new form was adopted. This form was distributed through the *Kentucky Medical Association's Journal* and announcements about the annual reporting of CME activities were disseminated through the *Journal* and the "Communicator."

As in previous reports the reporting form parallels the reporting requirements for the American Medical Association's Physician Recognition Award, because the same format has essentially universal acceptance by most all CME organizations.

The reporting period for this information is August 31, 1978 to August 31, 1979. The responses this year were less than in the past, due to the number of physicians that reported their credit hours in three year segments. The reporting information for this year is compared with reported data for the past two years to provide a more concise review of CME activities in Kentucky.

|  |                         |
|--|-------------------------|
| Reporting Period: 8/78-8/79 (one year) | 8/76-8/79 (three years) |
| Number of Eligible Members: 3441       | 3200                    |
| Number of Responses: 57                | 730                     |
| Percent Responding: 2%                 | 23%                     |
| Average Hours Per Physician: 167       | 83.06                   |

Even with a decrease in responses it is noted that the average hours per physician in Category I is increasing with the accreditation of more institutions across the State. In the following years it is anticipated that this figure would continue to rise. This year 15 individuals reporting recently completed their requirements for the AMA's PRA. This represents approximately 25 percent of the number of physicians in Kentucky who achieve this goal each year. It is interesting that in all of the categories the average credit hours has increased.

In analyzing the data available consideration should be given to a number of uncontrollable variables. These are that:

- The reporting of CME hours in different categories was not consistent.
- The different specialties report hours in different ways. It is obvious that some hours were reported in the wrong categories.
- To assist in standardizing reporting of credit hours, a new reporting form was utilized. Only through the education of the individual completing the form will the results be more accurate.
- Some of the hours reported for Category I may not have been Category I type programs.
- Since this is a voluntary program and completion of this form takes a significant amount of time to fill out, incentive to comply with the program is minimal and should be considered when reviewing the relatively low percentage of respondents.

| Categories  | I        | II    | III   | IV    | V      |
|-------------|----------|-------|-------|-------|--------|
| 77          | 39.54    | 9.83  | 18    | 8.52  | 27     |
| 78          | 43.55    | 8.69  | 16.70 | 4.68  | 29.44  |
| 79          | 64.72    | 11.27 | 25.98 | 14.20 | 34.43  |
| Total Hours | 27,198.7 | 7790  | 7501  | 2448  | 15,701 |

The percentage of those responding has decreased somewhat over the past year. To alleviate this problem and help obtain better reporting response from the membership the solicitation process will be expanded to include more information, and articles in the *Journal* and "Communicator" to explain the intent of the program. The reporting form will be published in the *Journal* every six months. The goals of the record keeping system are being served and this information does effectively document substantial voluntary participation in CME by Kentucky's physicians. The membership is strongly encouraged to maintain records on CME participation not only in Category I, but in Categories II-VI and report them to KMA in the following years. The reporting form will be maintained in the KMA office for five years and are available upon request. The information collected from these records is strictly statistical and is used in keeping the House of Delegates informed of the CME activities in Kentucky.

ITEMS FOR CONSENT

- 13. Report of the Scientific Program Committee—filed
- 14. Report of the Scientific Exhibits Committee—filed
- 15. Report of the Continuing Medical Education Committee—adopted
- 16. Report of the Cancer Committee—filed
- 19. Report of the Hospital Committee—filed
- 33. Report of the Emergency Medical Care Committee—The Reference Committee wishes to compliment the Emergency Medical Care Committee on its outstanding performance and strongly urges the adoption.
- 5. Report of the Chairman, Board of Trustees; Special Report B—Continuing Medical Education Records, only—adopted and filed for information.

Report of the Interspecialty Council

The KMA Interspecialty Council, which consists of 21 of the state's specialty groups, met several times during the past Associational year to determine how to unify and strengthen organized medicine in Kentucky.

The national theme encompassing medicine today is for a unified medical organization to answer the demands of society and provide insight into developing solutions to these problems. The American Medical Association and the American Association of Medical Society Executives have encouraged unity between all segments of organized medicine. Their suggestions are substantiated by lengthy reports and surveys that support the concept that numerous advantages can be realized through joint effort.

With this incentive as our guide, the Interspecialty Council requested that staff develop an indepth report that would give the Council direction in developing a comprehensive program which would emphasize sharing between the Kentucky Medical Association and the specialty societies of the State. Since KMA has the largest organizational structure, all activities should be coordinated through it. Data was collected from other state organizations which currently provide comprehensive programs for their state medical specialty societies, which was culminated into the report, "Federation Unity: Consideration of a Department of Specialty Societies." This report (copies of which will be available at the Reference Committee meetings) outlines the numerous services the Association could provide to the specialty societies.

The services would be administered through a specially-created Department of Specialty Services within the KMA organizational structure. It is envisioned that the Association would provide the administrative staff, office space, and handle ordering of supplies. Services that could be provided would include organization and implementation of scientific and business meetings, secretarial services, joint lobbying efforts, 24-hour telephone answering service, publication of newsletters, distribution of news releases, and press coverage. The end result would be a reduction in costs, improved services, and better continuity between specialty societies, and the Kentucky Medical Association.

KMA President, Carl Cooper, Jr., M.D., participated in these discussions with the Council and encouraged us to utilize the Association in developing a comprehensive program. KMA would not be embarking on a new program, but would be drawing from its past experience and that of other states. The Association already offers limited services, and our recommendations would only increase the scope of these services.

Our recommendations outlined in this report are a culmination of three meetings of the Council and are recommended to you as a means of unifying medicine in Kentucky.

The Interspecialty Council polled its membership and found that 13 of the 21 specialty societies are in favor of a special department for specialty societies and would actively utilize its services, and an additional 6 specialty societies are in favor of the concept but do not envision utilizing its services for several years.

To initiate this project will require the support of the Association for both manpower and financial assistance. The specialty societies will contract with the Association to provide services either on a fee-for-service or a yearly contract basis. As the Association is unaware of the exact amount that should be charged to each society, an arbitrary figure will have to be worked out, and after a year of service a comparison done on the cost to determine whether the fee-for-service or the contractual arrangement is better. The society would be free to select the best arrangement for subsequent years.

Current KMA personnel would staff this new section, but later when more societies are utilizing this department's serv-

ices, additional staff would be needed. Ultimately this department would have a staff solely working for the specialty societies, and all lobbying activities would be coordinated through the Association.

Initial operating costs will possibly exceed revenue provided by the specialty societies, therefore, we hope the Association will provide the appropriate backing until the department can become self-sufficient.

The ultimate result of the entire program is to provide unity within the profession while assuring that the specialty society's autonomy is maintained. To insure that specialty societies have an opportunity to input at all levels of the KMA organizational structure, the Council requests that the specialty societies recognized as members of the Interspecialty Council be given non-voting representation in the KMA House. The Interspecialty Council requests that a specialty society be authorized one Delegate and one Alternate Delegate, who will be afforded the opportunity to address the House when it meets.

To avoid confusion on the House floor, a special section, preferably in front of the Alternate Delegate section, should be set aside for specialty societies. The Interspecialty Council feels it is not necessary at this time to grant specialty societies voting power; however, the Council members feel the opportunity to have a representative on the House floor is necessary to facilitate better input into the House proceedings, minimize misunderstanding, and subsequently strengthen the organization.

The Interspecialty Council meets annually with organizations such as the Kentucky Peer Review Organization and Blue Cross and Blue Shield of Kentucky to discuss projects they have undertaken to facilitate better patient care. The Council provides input and recommendations to these groups and others that come before it. We hope this trend continues so we might not only have a better working relationship within our own Association, but with the allied health professions as well.

As Chairman, I wish to extend my sincere appreciation to the Council members for their time and cooperation.

Paul J. Parks, M.D., Chairman

#### RECOMMENDATIONS

The Interspecialty Council recommends that:

1. The Kentucky Medical Association set up a Department of Specialty Societies within the KMA organizational structure.
2. The Department of Specialty Societies be located in the KMA Headquarters Office and administrative services be provided by KMA staff.
3. KMA enter into contractual arrangements with all interested specialty societies in providing services. The report, "Federation Unity: Consideration of a Department of Specialty Societies," be used as a guideline by the KMA for offering services, but not be bound to this report.
4. KMA provide financial assistance to this department until the time it is able to become self-sufficient.
5. The House of Delegates authorize the non-voting participation of a Delegate and Alternate Delegate from each specialty society who have membership on the Interspecialty Council.

#### Recommendations, Reference Committee No. 2

The Reference Committee heard testimony from both a member of the Interspecialty Council and a member of the Board of Trustees. The proponent from the Interspecialty



Council believes non-voting delegate representation would be a mechanism for designated representation of specialty groups. The Board of Trustees, on the other hand, feels that a mechanism already exists for any Kentucky Medical Association member to be heard in the House of Delegates.

The Reference Committee recommends adoption of the report with an amendment to Recommendation four that KMA finance this activity up to \$25,000 for one year.

William T. Watkins, M.D., Chairman of the KMA Board of Trustees, was recognized who relayed the Board's feeling that Recommendation No. 5 of the Report of the Interspecialty Council should be deleted.

Remarks were heard from the floor regarding the pros and cons of Recommendation No. 5, and on a call for the vote, the House approved the deletion of Recommendation No. 5; and further approved the fiscal note of \$25,000 to Recommendation No. 4.

### Resolution A

#### Daviess County Medical Society

WHEREAS, insurance companies have cancelled, or have failed to renew, insurance policies for reasons not related to competence of physicians, and

WHEREAS, payments have been made to plaintiffs from malpractice insurance when malpractice had not occurred, and

WHEREAS, the multiplying costs of insurance to the patient and to society are beyond the costs of medical care, and do not improve the quality of medical care, and

WHEREAS, it is not appropriate for an insurance company to dictate the requirements for membership on a medical staff, and

WHEREAS, the competence of a physician is established by factors other than insurance coverage, therefore be it

RESOLVED, that the Kentucky Medical Association oppose any requirement that a physician have malpractice insurance to be eligible for membership on a hospital medical staff.

#### Recommendations, Reference Committee No. 2

Reference Committee No. 2 reviewed Resolution A—Inappropriate Requirements for Staff Membership (Daviess County Medical Society) and recommends adoption of the substitute wording proposed by the Board of Trustees. A representative of the Daviess County Medical Society was present, found no objection to the substitute wording, and felt that the main concept of the Daviess County Medical Society Resolution was addressed.

The revised Resolution recommended by the Reference Committee reads as follows:

“RESOLVED, that each hospital medical staff should determine for itself whether it will require professional liability insurance coverage, or show fiscal responsibility as a condition for hospital staff privileges; and be it further

RESOLVED, that the Kentucky Medical Association oppose any attempt by the hospitals' insurers to mandate that a physician have malpractice insurance to be eligible for membership on a hospital medical staff.”

A motion was made, seconded, and carried that Resolution A be adopted as amended by the Reference Committee.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 2 as a whole as amended.

(The motion was seconded and carried.)

#### REFERENCE COMMITTEE NO. 2

Edwin J. Nighbert, M.D., Lexington, Chairman  
James S. Brashear, M.D., Central City  
Michael B. Flynn, M.D., Louisville  
Wiley E. Kozee, Ashland

### REFERENCE COMMITTEE NO. 3

*W. Bruce Hamilton, M.D., Shepherdsville  
Chairman*

Reference Committee No. 3 considered the following reports and Resolutions:

- 17. Report of the Maternal Mortality Study Committee
- 21. Report of the Committee on Occupational Health and Environmental Quality
- 25. Report of the Committee on National Legislative Activities
- 26. Report of the Committee on State Legislative Activities
- 38. Report of the Committee on Physicians' Health
- Resolution B—Support of Kentucky Medical Insurance Company (Board of Trustees)
- Resolution C—The Direction of Physician Extenders (Nelson County Medical Society)
- Resolution E—Certificate of Need (Franklin County Medical Society)
- Resolution H—Repeal of Optometric Drug Law (Jefferson County Medical Society)
- Resolution L—Physicians' Assistants (Harlan County Medical Society)
- Resolution P—Physicians' Assistants (Board of Trustees)

Reference Committee No. 3 reviewed the following reports and Resolution and recommends they be filed or adopted as indicated, by the consent of the House, without discussion:

### Report of the Committee on National Legislative Activities

This year has seen a considerable amount of legislative activity at the national level related to medical care concerns. It is gratifying that KMA has had involvement with some of these major concerns. Even though a small state, our voice has been heard through our Congressmen, as well as through the AMA's Washington efforts.

One of the major proposals being discussed as this report is written relates to amendments to the Health Planning Law and, specifically, the application of Certificate of Need (CON) provisions to physicians' offices. One version of this provision passed the Senate last year. During this session, most of the attention on this issue has been given by the Health Subcommittee of the House Interstate and Foreign Commerce Committee, and Kentucky's Tim Lee Carter, M.D., has played a key role in these discussions. At this time, CON essentially does not apply to physicians' offices. However, given the Congressional legislative process, this could change momentarily.

Another major issue this session has been various hospital cost containment proposals, notable of which were: S. 570 and H.R. 2626, which were Administration bills; and S. 505, sponsored by Senator Herman Talmadge (D-Ga.). Both Administra-

tion proposals indirectly recognize the Voluntary Effort initiated by the AMA, AHA, and the Federation of American Hospitals, but called for the triggering of caps on hospital costs if the rate of increase was not kept within set limits. Senator Talmadge's bill is concerned primarily with Medicare and Medicaid reform, and cost containment provisions in it are basically incidental. None of the bills, however, have been acceptable to organized medicine.

A third major concern has been with National Health Insurance (NHI). All major proposals recently have focused on catastrophic insurance coverage, rather than the full coverage, and there appears to be a line of consensus among all of them. Bills which call for catastrophic NHI have been submitted by Senator Russell Long (D-La.); Senator Robert Dole (R-Kan.); Representative Corman (a Kennedy/Labor version); and an Administration bill. Each proposal differs to a degree, but all call for mandatory catastrophic coverage to be offered through employers, with federal coverage provided to current Medicare and Medicaid recipients, and a role for the private health insurance sector. Many Washington observers predict that catastrophic legislation may be passed by the 96th Congress.

KMA's legislative efforts were directed to these proposals, as well as other legislative provisions relating to tax reform for nonprofit professional organizations; capitation payments to medical schools; hospital affiliated primary care programs; and others.

In the regulatory area, KMA made contact and comments on such issues as regulations for Health Maintenance Organizations; Professional Standards Review Organizations; Certificate of Need provisions; Medicare reimbursement of physicians; and reimbursement reporting for hospitals, the SHUR regulations (Systems for Hospital Uniform Reporting).

A large part of the effectiveness in legislative activities is based on the communications and rapport established with Congressmen. KMA is fortunate in having established good rapport with our representatives in Washington, and is likewise fortunate that some of Kentucky's Congressmen have achieved positions where they can influence medical legislation. In this context, it is worth noting that Kentucky can boast three high-ranking Representatives, who are: Representative Carl Perkins, who Chairs the House Committee on Education and Labor; Representative William Natcher, who Chairs the Subcommittee on Labor, Health, Education and Welfare of the House Appropriations Committee; and KMA member, Congressman Tim Lee Carter, M.D., who is the ranking minority member on the Subcommittee on Health of the House Interstate and Foreign Commerce Committee.

The AMA has recognized and honored Doctor Carter for his efforts, and at the December AMA meeting, he was honored by being awarded AMA's Benjamin Rush Award, for which he had been nominated by KMA. Doctor Carter has been the key figure on a number of issues, and has represented Kentucky extremely well.

The Washington visitation and banquet honoring Kentucky's Congressmen was held this year. The trip was well attended by KMA representatives, with more than 25 physicians and their spouses being present. During visitations, most all Congressmen were seen personally, and KMA's views on some major legislative proposals were expressed. The Congressmen were in substantial attendance at the banquet, and it was a most enjoyable occasion. Attendance at the banquet by the Congressmen was somewhat hampered by the fact that it was held during a pretty busy part of the Congressional session. At

the time of the banquet, both House of Congress were heavily involved in energy matters and other major concerns, which occupied a great deal of their time.

This report mentioned earlier that KMA enjoyed a good bit of effect in Washington for its proportional size. A large part of this effectiveness must be attributed to AMA's efforts. For the information of the members, a brief description of the way AMA conducts its legislative affairs is in order.

As with KMA, all major objectives are established by the House of Delegates. These objectives are translated into specific goals by the Board of Trustees, and AMA's Council on Legislation is responsible for reviewing and recommending positions on specific legislation and suggesting proposed legislation that can be recommended by AMA, in the same manner as KMA's Committee on State Legislative Activities operates.

Day-to-day legislative work is carried on by the Washington Office, which has five legislative representatives and some twenty back-up staff members. The Washington Office, with the direction and assistance of AMA's main office, also makes heavy use of state medical associations and urban societies through contacts with key Congressmen on various issues. This Federation approach has established the AMA's legislative effort as one of the most effective and authoritative in Washington.

As Chairman, I would like to extend my appreciation to the members of the Committee on National Legislative Activities for their key contacts and other efforts during the year.

Fred C. Rainey, M.D., Chairman

## **Report of the Committee on State Legislative Activities**

The Kentucky General Assembly met briefly in January of this year in a special session with a specific agenda. While the KMA monitored the session very closely for legislation involving health issues, nothing of substance or of interest directly affecting the practice of medicine was introduced. The Frankfort office was open and provided daily information on the activities taking place.

The Interim Legislative Committees are meeting weekly developing and reviewing proposed legislation for the 1980 session. Two areas of major concern are the allied health fields and the State regulatory bodies. First, there is increasing activity by other areas of the health field in their attempts to practice medicine by fiat through legislation rather than by education. Secondly, the State regulatory agencies continue to demand a great deal of attention by Committee members and staff. A fine line exists between the various advisory committees and the State Legislative Committee, particularly in the areas of radiology, laboratory and the various health regulatory boards. We maintain almost daily contact with these agencies in regard to proposed regulations and legislation. We are also interested in legislation which funds good medical programs. We will be especially active in assuring that these programs are adequately funded to meet their intended goals.

The 1980 General Assembly promises to be a very demanding session for KMA as the vast majority of legislation not in the best interest of the health of Kentuckians introduced during the 1978 session will be re-introduced. The Committee on State Legislative Activities will meet soon after the November election to discuss legislation and to formulate plans for the upcoming session. We expect approximately 150 bills, or 10



percent of the total legislation introduced, to be health related. This shotgun approach is very difficult to combat and increasingly places organized medicine in a defensive posture.

While the Committee, KMA leadership and staff make every effort to contact the 138 Representatives in Frankfort, the most effective lobbying is carried out by the KMA members in their local communities. We urge all physicians to contact their elected representatives and discuss relevant issues with them to increase their knowledge and awareness of health issues. To a great extent, much of the criticism of organized medicine is laid at the feet of the physicians who do not get involved in the legislative process.

During the past year we have met with many members and specialty societies of KMA regarding legislation expected to be introduced during the 1980 session. Their suggestions and recommendations will be reported to the Committee in November. Continuous discussions are also being held with allied health groups regarding legislation and regulations affecting their activities.

Historically, KMA's effectiveness has been enhanced by our togetherness and the concept of one voice speaking for all physicians. Fragmentation leads to disunity and confusion, not only among our membership, but among the legislators themselves. While we urge you to get involved, each member must take the responsibility of informing himself prior to his discussions with his elected Representatives. If you will be visiting Frankfort during the session, please contact a member of the Committee or staff to brief you on legislation of interest. Many bills change from day to day, even hour to hour, thus altering our official positions.

As Chairman of the Committee on State Legislative Activities, I am deeply appreciative of the assistance and direction that has been given to the Committee this year. We wish to thank personally the 138 Key Men who work so diligently to assist us in our efforts. The KMA continues to be a respected and viable organization in Frankfort by those who represent you. Our continued success is dependent upon your vigilant interest and personal commitment to legislation beneficial to all Kentuckians.

Carl Cooper, Jr., M.D., Chairman

## **Resolution B**

### **KMA Board of Trustees**

WHEREAS, the House of Delegates at its 1978 Annual Meeting directed the Board of Trustees to establish a physician-owned professional liability insurance company, and

WHEREAS, the Board did establish the Kentucky Medical Insurance Company, and over 900 physicians have already invested over \$1,400,000 in the company which on June 1, 1979 became operational, and

WHEREAS, the Kentucky Medical Insurance Company has not only provided needed insurance to Kentucky physicians, but has profoundly affected the general market in this state and caused the commercial carriers to lower or maintain their current rates, now therefore be it

RESOLVED, that each Kentucky physician be encouraged to participate in our physician-owned insurance company and to recognize that the continuing growth and health of the Kentucky Medical Insurance Company insures that there can be no repetition of the medical malpractice insurance crisis of 1975-77 with insurance being either not available or the rates being astronomical, and be it further

RESOLVED, that those physicians not yet participating in the Kentucky Medical Insurance Company recognize their responsibility in supporting this successful example of physicians solving their own problems by giving all possible positive thought to placing their coverage with their own company.

### **Recommendations, Reference Committee No. 3**

#### *Items for Consent*

25. Report of the Committee on National Legislative Activities—filed

26. Report of the Committee on State Legislative Activities—filed

Resolution B—Support of Kentucky Medical Insurance Company (Board of Trustees)—adopted

## **Report of the Maternal Mortality Study Committee**

The Maternal Mortality Study Committee has continued to meet twice a year to discuss complicated maternal cases that result in the death of the patient. Even though the maternal mortality rates are on the decline, the Committee continues to review 15-20 cases a meeting to determine possible needs and preventions that will increase the maternal survival rate. The most noteworthy cases are brought to the attention of the membership through periodic publication of the facts in the *KMA Journal*.

John W. Greene, M.D., Chairman

### **Recommendations, Reference Committee No. 3**

Reference Committee No. 3 has reviewed the report of the Maternal Mortality Study Committee and is disappointed that this report does not reflect implementation of the instructions of the last House of Delegates. We would recommend that an annual statistical analysis be made a part of future committee reports and that individual physicians be invited to discuss each case with the Committee.

Reference Committee No. 3 recommends the report be adopted with the additional recommendations.

A motion was made, seconded, and carried that the Reference Committee's recommendations be accepted.

## **Report of the Committee on Occupational Health and Environmental Quality**

In October, 1978, all members of the KMA Committee on Occupational Health and Environmental Quality were written asking if anyone had any particular projects or problems which he would like to have addressed during the 1978-79 Association year. Some of the members replied. Most indicated they did not have any particular subject which they wanted discussed.

The Chairman attended an AMA Conference in Chicago, Illinois, in October, 1978, as a representative of the Kentucky Medical Association. The purpose of this conference was to help the AMA decide in what areas it could be beneficial to individual medical societies. This was a very instructive conference, and I appreciated the opportunity to represent KMA in the capacity as Chairman of the KMA Occupational Health and Environmental Quality Committee.

The first meeting of the KMA Committee was held on March 14, 1979. Mr. John McClure from the Kentucky De-

partment for Human Resources presented a program on hazardous waste disposal and new regulations proposed governing the disposal of same. This meeting, although not well attended, was very informative.

As Chairman of the KMA Committee, I was asked to serve on the Governor's Commission of Hazardous Waste Disposal. This organization's purpose is to recommend regulations to the Governor to be passed on to the legislature for proposed legislation to control hazardous waste disposal.

The second meeting of the KMA Committee on Occupational Health and Environmental Quality was held May 16, 1979. Doctor John Spratt spoke about carcinogens and listed some of the carcinogens that the public faces every day and types of cancers the carcinogens cause. This meeting was also very interesting and informative, but few members of the Committee attended.

There are some problems which still exist with one of the major areas of concern being regulations for air pollution in Kentucky. This subject is being studied, and we believe a workable solution will result.

The KMA Committee could be very helpful to the Kentucky Department for Human Resources. However, we have not been asked by this department to assist in any way, and we have not had any particular problems addressed to us during the past year.

While great interest is displayed by members of the KMA in the area of Occupational Health and Environmental Quality, it becomes very difficult for Committee members to relate to specific site or locale problems of a given area without recommendations from local societies or physicians. The Committee would encourage these local committees to refer any problems in the area of Occupational Health and Environmental Quality to the KMA Committee where assistance might be useful, particularly in the area of State or Federal Governments.

This Committee should continue to meet periodically to have speakers cover topics which are pressing and to keep well informed in all areas of environmental matters.

B. Frank Radmacher, M.D., Chairman

#### Recommendations, Reference Committee No. 3

Reference Committee No. 3 next reviewed the Report of the Committee on Occupational Health and Environmental Quality. The Reference Committee commends Doctor Frank Radmacher and the members of his committee for their efforts and feels that there will be an expanding use of this committee as governmental and private groups seek organized medicine's input in this area.

Reference Committee No. 3 recommends that this report be filed.

A motion was made, seconded, and carried that the Reference Committee's recommendation be accepted.

## Report of the Committee on Physicians' Health

Five meetings of the Committee on Physicians' Health were held this Associational year, as the Committee had set up a routine schedule of meetings every other month. The purpose of the Committee is to identify, confirm and, hopefully help rehabilitate physicians with an impairment that renders them dangerous to themselves, their patients, or their families.

The major hinderance to the Committee's work remains the problem of identifying impaired physicians. In our experience,

the existence of a physician with an impairment is ordinarily not at issue until the physician and his actions become detrimental to his peers in a clinical setting, as a member of the medical staff or through his medical practice. This is a logical development, but the Committee is concerned that more physicians with impairments should be identified simply for rehabilitative purposes.

In late September, the Chairman attended the AMA's Conference on the Impaired Physician to meet with counterparts in other states and discuss ways of dealing with the situation. At the meeting a number of subject areas were discussed, most notable of which was that in any location probably ten percent of all physicians have an impairing disability, most often one of substance abuse. Because of the beneficial forum this seminar provided, it would be appropriate for a member of this Committee to regularly attend. The next AMA Conference has not yet been scheduled, but will likely be held some time within the next year.

The House of Delegates directed that physicians with former impairments be appointed to the Committee to provide a depth of understanding of the problems to be faced. Two members of the Committee, as now constituted, were formerly impaired and have been an asset to our work.

To publicize the intent and availability of the Committee, the *Journal* editors were requested to allow a note to appear in every issue about the Committee's work, and this notice has appeared in the past several issues of the *Journal*.

In addition, the editors were kind enough to permit a special editorial, which appeared in the January, 1979 issue on this subject.

With the same objective, the Chairman met with the leadership of the KMA Auxiliary to seek their assistance in identifying impaired doctors and drafted an article which has since been published in their newsletter. Committee members have also individually made contact with local Auxiliaries for their assistance.

Feeling that individuals who ultimately develop impairments may often show a tendency towards substance abuse in early life, contact was made with both medical schools through the year. Both schools were requested to allow one of the Committee members to speak to the Freshman medical class, to allot a portion of any orientation to substance abuse, and to give thought to developing a regular course on impairments to be presented throughout the medical school years.

Two of the Committee members attended a conference on impaired physicians sponsored by the Ohio State Medical Association, which has developed a statewide network, called the Physician Effectiveness Program, to deal with physician impairments. In the Ohio situation, there is a state committee with a liaison person in each county. Of interest was the system developed in Ohio for referrals, investigation, confrontation and treatment of impaired physicians. The Ohio program boasts an impressive rehabilitation record for individuals once enrolled in the program.

For its own operation, the Committee has been working this year on the development of a process for dealing with impairments. The process has a number of steps, but in summary, they consist of receiving reports of possible impairments; confirmation of the impairment through a creditable source; confrontation of the impaired physician by Committee members with the fact of his disability; and a subsequent rehabilitation effort. While the Committee has not had any experience using the entire process for any one individual, it has applied



different portions to a number of impaired physicians, and feels that the concept is sound.

Other efforts were made to help identify impaired physicians, such as a letter sent to all hospital administrators, and investigators and confirmation of impairments have been assisted through individual Committee member contacts and through KMA's routine investigatory channels. The Committee has developed a list of tertiary rehabilitative facilities from information supplied by the AMA and other sources, and feels that the nucleus of an effective program has been developed.

The major problem with the Committee's work, again, is identification of impaired physicians. In addition to humanitarian and medical care concerns, current legal doctrine indicates that persons associated with an impaired physician who do not identify his problem to some authoritative source, bear a greater ultimate liability than if the impairment goes unreported. This statement is not intended as a threat, but as a matter of fact, and the Committee would urge the help of the membership on this problem.

Appreciation and thanks is extended to the members of the Committee who have met so faithfully and have made such substantial contribution in this area that, for KMA, was uncharted.

David L. Stewart, M.D., Chairman

#### **Recommendations, Reference Committee No. 3**

Reference Committee No. 3 reviewed the Report of the Committee on Physicians' Health and would like to commend Doctor David Stewart and the members of his committee for their good work with this difficult and sensitive problem.

Reference Committee No. 3 recommends this report be filed.

A motion was made, seconded, and carried that the Reference Committee's recommendation be accepted.

## **Resolution C**

### **Nelson County Medical Society**

WHEREAS, there is an increasing number of health practitioners and physician extenders competing for positions as primary health care providers with many acting as independent practitioners without supervision, and

WHEREAS, the Nurse Practice Act in Kentucky can be interpreted to allow independent practice, and

WHEREAS, PL95-210 allows practitioners to be eligible for direct payment in certain settings, and

WHEREAS, physicians' assistants and nurse practitioners have prescription privileges in many states, and

WHEREAS, F.T.C. rulings may require granting of hospital privileges to all health practitioners, and

WHEREAS, KMA and AMA favor the concept of physicians' assistants working with physicians to expand quality medical coverage, now therefore be it

RESOLVED, that the Kentucky Medical Association go on record and work toward the following principles:

1) Only a specific number (not more than two) of physician extenders should function under the supervision of each physician except in emergency or extenuating circumstances and in teaching settings.

2) Physicians' assistants or nurse practitioners should not write prescriptions, but may use prewritten prescriptions when they treat under protocol.

3) Hospital privileges be contingent on the principal that the practitioner must work under the responsible supervision of a

physician or physicians' group and perform only those delegated procedures as approved by the medical staff of the hospital. He must document his actions and this documentation and any orders written must be countersigned by the responsible physician, now therefore be it further

RESOLVED, this resolution be assigned to the appropriate committee in order to monitor the direction of functions, the needs assessments in the future, and make recommendations to the Board of Directors and the Legislative Committee.

## **Resolution L**

### **Harlan County Medical Society**

WHEREAS, the Harlan County Medical Society is in favor of appropriate enabling legislation to allow the employment and utilization of physicians' assistance in the Commonwealth of Kentucky, and

WHEREAS, the definition of a physicians' assistant's role would be defined within such legislation, and

WHEREAS, such legislation needs the well-informed support of the Kentucky Medical Association, now therefore be it

RESOLVED, that the Harlan County Medical Society requests that the KMA be on record in support of enabling legislation for physicians' assistants, which is based on the following considerations:

- (1) That a physicians' assistant must be a recognized graduate of a PA program of an accredited institution of higher learning;
- (2) That physicians' assistants must be certified through the National Board of Certification procedure for PA's;
- (3) That the functions of any PA shall be defined under an individualized job description developed by the employing physician and/or institution;
- (4) That such job description shall be approved by the State Board of Medical Licensure for a given practice setting;
- (5) That the State Board of Medical Licensure shall be provided a list of reasonable performance capabilities for PA's by the Kentucky Medical Association for assistance in their determinations;
- (6) That the definition of physician supervision include the concept of physician-to-patient accessibility as defined by the type of practice involved;
- (7) That the physician's supervision be required in a reasonable manner at the time of service provided, and not after the fact;
- (8) That there be no more than two, and preferably one, physicians' assistant working under the supervision of any one licensed physician.

## **Resolution P**

### **Board of Trustees**

RESOLVED, that the Kentucky Medical Association reaffirm its support for the concept of physicians' assistants with the following guidelines:

1. That a physician's assistant must be a recognized graduate of a PA program of an accredited institution of higher learning;
2. That physicians' assistants must be certified or eligible for certification through the National Board of Certification procedures for PA's;

3. That there be no more than two PA's working under the supervision of any one licensed physician, except those in training in an accredited institution;
4. Jurisdiction over PA's should be maintained by the Board of Medical Licensure;
5. That the physician's supervision be required in a reasonable manner at the time of service provided and in a manner acceptable to the Board of Medical Licensure;
6. Physicians' assistants or nurse practitioners shall not sign prescriptions;
7. The PA's must document their services in acute care and/or long-term care facilities and any orders written must be countersigned by the responsible physician, and be it further

RESOLVED, that this resolution be assigned to the appropriate committee in order to monitor the direction of functions, the needs assessments in the future and make recommendations to the Board of Trustees and the Legislative Committee.

#### Recommendations, Reference Committee No. 3

Reference Committee No. 3 considered Resolution C, The Direction of Physician Extenders, introduced by the Nelson County Medical Society, Resolution L, Physicians' Assistants, introduced by the Harlan County Medical Society, and Resolution P, Physicians' Assistants, introduced by the Board of Trustees, jointly and recommends the rejection of Resolutions C and L and the adoption of Resolution P.

Charles M. Brohm, M.D. of Jefferson County was recognized and proposed that an amendment be made to subparagraph 3 of the Resolution. On a call for the vote, the amendment was accepted, and subparagraph 3 of Resolution P now reads as follows:

- (3) That there be no more than two PA's working under the supervision of any one licensed physician, except those in training in an accredited institution, **and that the practice of a PA shall be limited to the same area of practice as that in which the supervising physician is qualified.**

A motion was made, seconded, and carried that the Reference Committee's recommendations be accepted, and that Resolution P be adopted with the change noted above.

## Resolution E

### Franklin County Medical Society

WHEREAS, the British Health Service and the Health Systems Agency Plans in the United States were designed by the same New York consulting firm and are in fact the same system, and

WHEREAS, the Federal and State Government, through Certificate of Need, control all health care facilities determining need, location, types of beds, equipment, and what services can be rendered, and

WHEREAS, in Great Britain all physicians are controlled through Certificate of Need as to location, type of services permitted, hospital privileges, and reimbursement for allowed services only, and

WHEREAS, the Kentucky Certificate of Need law specifically excludes physician offices from regulatory power, now therefore be it

RESOLVED, that the Kentucky Medical Association resist by every possible means extension of any Certificate of Need authority over physicians by controlling their offices, and be it further

RESOLVED, that the Kentucky Medical Association continue to defend the control of physicians remaining with the Medical Licensure Board under its statutory authority to control the Practice of Medicine, and be it further

RESOLVED, that the Kentucky Medical Association continue to resist the Certificate of Need Board's recent efforts to extend regulatory power over mobile units owned and operated by physicians, and be it further

RESOLVED, that the Kentucky Medical Association reconsider its current participation in the joint committee with the Certificate of Need Board that would redefine what is a physician's office and place limits by defining what it is not, and be it further

RESOLVED, that the Kentucky Medical Association be eternally vigilant to oppose any legislative effort to amend the Kentucky Certificate of Need Law that would jeopardize the exclusion of physicians' offices from regulatory power of Certificate of Need.

#### Recommendations, Reference Committee No. 3

Reference Committee No. 3 reviewed Resolution E, Certificate of Need, introduced by the Franklin County Medical Society, and suggested substitute wording submitted by the Board of Trustees.

After lengthy discussion, Reference Committee No. 3 recommends that Resolution E be adopted with the following amendments:

Change the first "WHEREAS" to read as follows:

WHEREAS, the British Health Service and the Health Systems Agency Plans in the United States are remarkably parallel systems designed to achieve control of health services, and"

Amend the first "RESOLVED" by adding the words "continue to" after the words, "Kentucky Medical Association." The first "RESOLVED" will then read:

"RESOLVED, that the Kentucky Medical Association continue to resist by every possible means extension of any Certificate of Need authority over physicians by controlling their offices and be it further . . ."

Delete the second to the last "RESOLVED."

Reference Committee No. 3 also recommends that the Kentucky Medical Association study the feasibility of a statewide Independent Practice Association.

The revised resolution will now read as follows:

"WHEREAS, the British Health Service and the Health Systems Agency Plans in the United States are remarkably parallel systems designed to achieve control of health services, and

WHEREAS, the Federal and State Governments, through Certificate of Need, control all health care facilities determining need, location, types of beds, equipment, and what services can be rendered, and

WHEREAS, in Great Britain all physicians are controlled through Certificate of Need as to location, type of services permitted, hospital privileges, and reimbursement for allowed services only, and

WHEREAS, the Kentucky Certificate of Need law specifically excludes physician offices from regulatory power, now therefore be it



**RESOLVED**, that the Kentucky Medical Association **continue** to resist by every possible means extension of any Certificate of Need authority over physicians by controlling their offices, and be it further

**RESOLVED**, that the Kentucky Medical Association **continue** to defend the control of physicians remaining with the Medical Licensure Board under its statutory authority to control the Practice of Medicine, and be it further

**RESOLVED**, that the Kentucky Medical Association **continue** to resist the Certificate of Need Board's recent efforts to extend regulatory power over mobile units owned and operated by physicians, and be it further

**RESOLVED**, that the Kentucky Medical Association be eternally vigilant to oppose any legislative effort to amend the Kentucky Certificate of Need Law that would jeopardize the exclusion of physicians' offices from regulatory power of Certificate of Need, and be it further

**RESOLVED**, that the Kentucky Medical Association study the feasibility of a statewide Independent Practice Association."

Reference Committee No. 3 recommends adoption of Resolution E as amended.

A question was raised from the floor regarding the advisability of including the last Resolved in the amended Resolution regarding KMA studying the feasibility of a statewide Independent Practice Association. Following discussion, a motion was made, seconded, and carried to adopt Resolution E as amended by the Reference Committee, but with the deletion of the last "Resolved."

## Resolution H

### Jefferson County Medical Society

**WHEREAS**, the "Optometric Drug Bill" passed by the 1978 Kentucky Legislature allows for the practice of medicine without proper training or licensure, and

**WHEREAS**, such intrusion upon the practice of medicine by non-medical practitioners through the legislative process rather than through education and training threatens the health and well-being of the citizens of Kentucky, and therefore is unalterably opposed by the members of the Kentucky Medical Association, now therefore be it

**RESOLVED**, that this House of Delegates reconfirm its opposition to allowing optometry the use of prescription medicine, diagnostic or therapeutic, and be it further

**RESOLVED**, that the Kentucky Medical Association place in **highest priority** its support for the repeal of the "Optometric Diagnostic Drug Bill," and its opposition to the passage of further optometric drug use legislation, and be it further

**RESOLVED**, that all Kentucky Medical Association members be asked to support **actively** this resolution.

#### Recommendations, Reference Committee No. 3

Reference Committee No. 3 next considered Resolution H, Repeal of Optometric Drug Law, introduced by the Jefferson County Medical Society.

Reference Committee No. 3 recommends that Resolution H be accepted with the substitution of the word "**high**" instead of "**highest**" in the second "**RESOLVED**".

Reference Committee No. 3 recommends Resolution H be adopted as amended.

A motion was made, seconded, and carried that the Reference Committee's recommendation be accepted.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 3 as a whole as amended. (The motion was seconded and carried.)

Mr. Speaker, I wish to thank the members of this Reference Committee, Doctors James P. Moss, N. H. Talley, John E. Trevey, and William R. Yates.

#### REFERENCE COMMITTEE NO. 3

W. Bruce Hamilton, M.D., Shepherdsville, Chairman

James P. Moss, M.D., Louisville

N. H. Talley, M.D., Princeton

John E. Trevey, M.D., Lexington

William R. Yates, M.D., Hebron

Following a short break, Wally O. Montgomery, M.D., Paducah, took the podium as Chairman of the KEMPAC Board of Directors to present the annual KEMPAC Board report which follows:

Mr. Speaker, Fellow Delegates, and Guests:

As Chairman of the KEMPAC Board of Directors, thank you for giving me the opportunity to report on KEMPAC activities this past year.

The seminar on Monday evening was successful and attended by a record number of people. For the first time we had to turn down those who wanted tickets.

KEMPAC, through physician candidate support committees, has participated in 41 candidate support committees this year and has contributed \$25,350, which was about \$5,000 more than in 1978. This involvement was in the primary and general elections, and with the advice and help of our State and National Legislative Committees, we concentrated support on key races.

Thirty percent of you Delegates are members of KEMPAC, as compared to 35% last year. The total membership is 1,025, including 180 sustaining members.

The KEMPAC Booth is set up in the lobby near the Headquarters Office. You may now pay your dues by VISA and Master Charge.

As you know, in the past, KEMPAC dues were non-deductible, but a recent change in the tax laws has been made to allow a deduction. However, all membership contributions must be written on your personal check and not a corporate check.

In 1978, as in past years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC and recommended 100% participation by doctors and their spouses. It further recommended a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts on behalf of our free enterprise system and the freedom of the art and science of medicine.

I move that you reaffirm this endorsement and approve KEMPAC billing with the KMA dues billing. I wish to ask that you include your contribution when sending in your other dues. This is your organization and you must support it.

On behalf of the KEMPAC Board, I want to thank the KMA Board of Trustees, you Delegates, the Auxiliary to KMA, and staff for your help and support.

Following Doctor Montgomery's presentation, a motion was made, seconded, and carried to accept the KEMPAC report.

## REFERENCE COMMITTEE NO. 4

*Glenn W. Bryant, M.D., Louisville*  
*Chairman*

Reference Committee No. 4 considered the following reports and Resolutions:

12. Report of the President, Kentucky Blue Cross and Blue Shield

20. Report of the Advisory Committee to Blue Cross and Blue Shield

24. Report of the Claims and Utilization Review Committee

34. Report of the Committee on Health Care Costs

41. Report of the KMA Advisory Committee to KPRO

Report of the Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement

5. Report of the Chairman, Board of Trustees; Special Report A—Report of the Ad Hoc Committee on Health Care Costs, **only**

Resolution K—Function of District Utilization Review Committees (Pennyrite Multi-County Medical Society)

Resolution N—Prescription Forgeries and Abuse of Controlled Substances (Fayette County Medical Society)

Reference Committee No. 4 reviewed the following reports and Resolution and recommends they be adopted or filed as indicated, by the consent of the House, without discussion:

### **Report of the President of Blue Cross and Blue Shield of Kentucky**

It is my pleasure to provide the KMA House of Delegates with a status report of the operations of Blue Cross and Blue Shield of Kentucky. The report will cover enrollment, benefit payments, utilization patterns, new products and programs, and issues and concerns.

Blue Cross and Blue Shield of Kentucky has grown to 1,562,136 members as of January 1, 1979. This membership includes over 100,000 people who are enrolled in the Medicare Supplement programs and represents 45% of the population of Kentucky. In addition to basic coverage, some 1.1 million members carry a Major Medical type coverage.

Claims volume for all programs continues to increase. During 1978, Blue Cross and Blue Shield of Kentucky processed 2,600,000 claims for services rendered by providers. Physicians and other providers throughout Kentucky were reimbursed over \$261 million for services rendered to members with underwritten coverage and an additional \$20 million for services rendered to Medicare recipients. The Plans continue to be financially sound with adequate reserves to meet benefit payment projections.

There continues to be a demand for benefit programs covered under the usual, customary and reasonable payment mechanism. Currently, we have over 400,000 members covered under the Blue Cross and Blue Shield Usual, Customary and Reasonable Program and membership continues to increase. In 1978, 298 physicians signed participating agreements for the UCR Program which brought the total number of participating physicians to 3,051. This represents 80% of the practicing physicians in Kentucky.

With new technology and medical procedures continually being developed, there is a corresponding need for new benefits and administrative procedures. Blue Cross and Blue Shield of Kentucky will continue providing leadership in developing new products to meet these needs. New programs include:

—The Blue Shield Indemnity Schedule F is now being marketed.

The new program is an improved surgical schedule and provides improved in-hospital medical benefits. Schedule F is designed to approximate 80 percent of physicians' UCR charges for covered services.

—Vision and Hearing Programs have been developed and are now being made available in the marketplace.

—The Plan has voluntarily implemented extended alcoholism benefits for all members. In addition to detoxification which has always been a Blue Cross benefit in approved hospitals, we have expanded benefits to include rehabilitation in approved facilities when medically necessary and under physician direction. In addition, an optional rider covering out-patient physician services is available to groups.

—We are in the process of upgrading the accident x-ray and lab rider on Blue Shield Schedules D, E and F. The new improved diagnostic lab and x-ray rider pays for services rendered on a UCR basis up to the limits of the member's contract. This change, when completed, will include all group, direct-pay Farm Bureau members.

—In October 1978 we began marketing a High Option Medicare Supplement Program. Currently, over 38,500, or 35%, of all Medicare Supplement members are enrolled in the High Option Program. A total of 33,800, or 88%, of these members were originally enrolled in the Low Option Program and changed to the High Option Program.

—A specific plan of action is currently being implemented to eliminate the Extended Benefits level of coverage and change these members to the \$250,000 Major Medical Program.

The cost of care continues to be among the greatest concerns of the American people. Cost containment is a key issue in the health care industry today and a major thrust within the Plan. Blue Cross and Blue Shield of Kentucky continues to work in a cooperative effort with all elements of the health care community in an effort to stem the rising cost of health care. The Plan is actively involved in a number of programs directed at holding down the rising cost of care. During 1978, the Plan's comprehensive 17-Point Cost Containment Program resulted in over \$14 million savings to Blue Cross and Blue Shield programs in Kentucky.

For three straight years utilization declined rather substantially. This has not occurred during the first six months of 1979. Actually, year-to-date, we record some increase and, for the year, expect utilization to be approximately equal to or slightly higher than for 1978.

The split billing arrangements of some physicians, because they result in increased benefit and administrative costs, are of major concern. Our staff has worked with a special Ad Hoc Committee of the Kentucky Medical Association to address this issue. Procedures have been finalized to begin processing claims for the split billing arrangements using the UCR approach January 1, 1980. This will include the profiling of physicians and payment on a participating and non-participating physician basis.

Blue Cross and Blue Shield of Kentucky conducted a concurrent care experiment in two hospitals during 1978 to closely examine utilization. The program, designed to benefit both the patient and provider, arranged for hospital utilization review



committees to evaluate necessity of admission and length of stay. In the design of the program the Plan agreed that there would be no diagnostic rejections. The results indicate that the experiment has effected a reduction in the length of stay. It is now determined that the program is on-going with expanded implementation in other Kentucky hospitals.

The Medical Necessity Project, which the Blue Cross Association and Blue Shield Association initiated in 1977 in cooperation with the American Medical Association and appropriate physician specialty groups, was further expanded this year. This latest phase of the project is designed to: one, eliminate additional outmoded medical and surgical procedures, and two, eliminate routine batteries of tests performed upon admission to a hospital unless specifically ordered by a physician. The Medical Necessity Project in Kentucky has been considered by the appropriate committees of the Kentucky Medical Association and the Kentucky Hospital Association. These new phases will be implemented the first part of 1980.

Blue Cross and Blue Shield staff is presently finalizing program development and educational efforts to convert to the official American Medical Association Claim Form January 1, 1980. This form should provide physician offices with a more uniform method of claims filing.

The contract with the State of Kentucky covering all employees of the State and all employees of Boards of Education will have an improved benefit program beginning October 1, 1979. The contract has been changed from the Schedule E to the Schedule F Blue Shield Indemnity Program which provides improved surgical and in-hospital medical benefits. Additionally, they added a program for Second Opinion Surgery which is a voluntary program and will work as follows:

If an employee or eligible dependent wishes a second opinion on a recommended elective surgery, they can ask for a second surgical consultation from another physician qualified to perform the surgery. Payment will be made for the second consultation and any diagnostic procedures with payment made at the usual, customary and reasonable allowance. If the first and second opinion differ, then payment will be made for a third opinion. Participation in the program is voluntary and the final decision on the proposed surgery is made by the member.

Perhaps one of the greatest concerns in the health care industry today is appropriate planning, a basic principle of cost containment. It is a shared belief that increased efforts by all professionals, providers and those in the prepayment industry can achieve more than has been accomplished. In June of this year, Blue Cross and Blue Shield of Kentucky served as host to a group to discuss planning in Kentucky. Representatives of the medical community, hospitals, government, leaders of business and industry, labor and others sat down to identify issues and strategies for improving the health planning process in Kentucky. It is anticipated that additional meetings for further action will be taking place.

National Health Insurance has been on Congressional agendas for so many years that many have a sense of security that nothing will pass. However, on the advice of our Washington staff, negotiations may now result in compromises leading to some form of catastrophic coverage to be legislated in 1980.

Blue Cross and Blue Shield of Kentucky will continue working with the physicians and providers of Kentucky to provide the best medical and surgical coverage at the lowest possible cost.

Blue Cross and Blue Shield of Kentucky appreciates the cooperative spirit of this House of Delegates and the Kentucky Medical Association.

Donald W. Giffen, President

## Report of the Advisory Committee to Blue Cross and Blue Shield

The KMA Advisory Committee to Blue Cross and Blue Shield met at KMA Headquarters Office on May 31, 1979.

The purpose of the Committee is to "monitor the operation of Kentucky Blue Cross and Blue Shield with the objective of striving to furnish for the public the most advantageous coverage possible for the dues paid, avoiding abuses of Blue Cross and Blue Shield to include studying and correcting trends before they develop into abuses and continuing to keep Kentucky physicians informed, interested, and with a voice in the operation of Blue Cross and Blue Shield."

Attending the meeting were two members of the Medical Services Division of Blue Cross and Blue Shield of Kentucky, B. Frank Radmacher, M.D., and Parnell Rollings, M.D.; Mr. Doug Sutherland, Senior Vice President; Mr. Alan Leichhardt, Director of Provider and Professional Relations; and Mr. Fred Compton, Assistant Director of Provider and Professional Relations.

The Committee heard a report on the activities of the KMA Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement established by the 1978 KMA House of Delegates. The report included discussion on Resolutions L & Q that were referred to this Ad Hoc Committee. A separate detailed report of the Ad Hoc Committee's recommendations will be submitted to the House of Delegates.

In the discussion which followed, it became apparent that the Advisory Committee to Blue Cross and Blue Shield felt it appropriate to expand its role to include all third party carriers and to make the necessary changes in the composition of the Committee to better represent the various specialties, particularly primary care. It was the unanimous recommendation of the Committee that the KMA Board be asked to consider changing the committee's name, purpose, scope and membership representation.

The Committee then heard brief reports from members of the Blue Cross and Blue Shield of Kentucky staff. These reports were informational in nature and were designed to let the membership have a general overview of the different programs which Blue Cross and Blue Shield of Kentucky is involved in.

These reports included a status of the Medical Necessity Project recently recommended to local Blue Cross and Blue Shield Plans by the Blue Cross and Blue Shield Association. The objective of the Project is to identify and reduce the incidence of procedures that contribute to the cost of care without a parallel contribution to the quality of care. This phase of the ongoing Medical Necessity Project involves two issues:

1. Payments for routine hospital admission tests will be made only when they are specifically ordered by the attending physician and are consistent with good medical practice.

2. Twenty-six seldom performed diagnostic tests that have been determined to be of no current usefulness will no longer be paid unless specifically justified.

Staff reported that considerable discussion and communication would be held with the appropriate leadership of the Kentucky Medical Association and the Kentucky Hospital As-

sociation to provide complete understanding before implementing this phase of the program. Blue Cross and Blue Shield of Kentucky has set a target date of January 1, 1980 for implementation. It was noted that the project had been referred to an Ad Hoc Committee of the Board of Trustees and our committee received the report for information.

The Blue Cross and Blue Shield staff outlined a number of programs that are currently underway. We were pleased to learn that they have developed a new and improved Blue Shield program referred to as Schedule F. This new schedule increases the allowances paid under its fee schedule which more adequately reflects today's costs not only for surgery, but for in-hospital primary care medical payments. Blue Cross and Blue Shield of Kentucky now offers three indemnity type programs, Schedules D, E, and F. In addition, Blue Cross and Blue Shield of Kentucky markets a Usual, Customary and Reasonable Program that is designed to pay in full, physician's charges for covered items.

The Blue Cross and Blue Shield staff reported that due to increased demand and the need for uniformity and simplicity that they were going to convert from their present Blue Shield claim form to the AMA approved claim form, effective January 1, 1980. It was noted before reaching this decision Blue Cross and Blue Shield of Kentucky consulted with the American Medical Association, other Blue Shield plans, and KMA, as well as practicing physicians to ensure that the form they plan to use conforms to the format approved by the Council of Medical Services of the American Medical Association. An educational effort to inform physicians of the change and to ensure a smooth transition to the use of the new form is planned. Revisions of the Blue Shield Manual will be sent to physicians prior to implementation.

Cost restraint is a subject of considerable interest today, and Blue Shield reported on a new program they developed to work with large groups when their utilization trends become above average. Staff reported that this is working very well and that the groups participating in this program have been able to identify factors influencing these utilization trends and correct them.

As reported last year, Blue Shield has an experimental program in effect which established concurrent review activities for Blue Cross in-patients in two pilot hospitals. The purpose of the concurrent experiment is to reduce unnecessary lengths of stays, reduce the incidence of unnecessary admissions and eliminate retroactive denials for diagnostic admissions. Staff noted that the program has been successful and they are hopeful it will be expanded to other hospitals. Staff commented on several changes which have been necessitated in Blue Cross and Blue Shield programs as a result of recently enacted legislation. The last session of the Kentucky General Assembly mandated that all health insurance carriers include benefits for alcoholism as a part of their basic benefit package. Blue Cross and Blue Shield of Kentucky have been providing benefits for alcoholism for acute care treatment. Under the new program, benefits for acute care and rehabilitative treatment will be provided for all Blue Cross and Blue Shield of Kentucky subscribers on an inpatient basis at a Blue Cross Member Hospital or approved alcoholism treatment facility. In addition, an outpatient rider will be marketed on an optional basis for group contracts only.

Also in the last session, a law was passed which requires all health insurance carriers to provide for elective abortions only

through the purchase of a rider at an additional cost. Due to difficulty in obtaining definitive regulations and program guidelines, Blue Cross and Blue Shield of Kentucky elected not to cover any elective abortions and not to market this type of rider in Kentucky at this time.

Staff also reported on recent federal legislation which requires that waiting periods and benefit days for maternity care must be provided for all female employees regardless of their marital status and be consistent with the level of benefits for other illnesses.

The committee heard some discussion from the Medical Services Division of Blue Cross and Blue Shield of Kentucky concerning activities in the adjudication of claims. It was reported that when considering rejection of claims as being primarily for diagnostic admissions there existed considerable gray areas. It was recognized that when payment for an admission is denied, it creates a hardship for the patient and often a conflict between the patient and physician. It was noted, however, that many times when a claim has been questioned it is because there is not enough information on the patient's record to justify the admission. It was also brought out that the rejection rate for diagnostic admissions was extremely low.

The committee also heard brief reports regarding Blue Cross and Blue Shield claims experience, physician summaries and the increase in the number of hospital based radiologists billing separately for their professional components.

As Chairman, I appreciate the attendance and active participation of the committee members and the interest and assistance provided by the Blue Shield staff.

Walter R. Brewer, M.D., Chairman

## Report of the Claims and Utilization Review Committee

The work of the Claims and Utilization Review Committee continued routinely. The volume of claims this year is down somewhat from previous years, however, and the types of claims reviewed have changed.

By far the majority of cases the Committee considered involved length of stay and utilization review. Also reviewed were multiple claims that involved a question of "practice patterns." Very few fee claims were received.

It is predicted that the lack of fee claims is because most all carriers have sufficient statistical information to perform claim audits and have, likewise, streamlined their claims processing procedures to the point where almost all fee claim cases are either settled internally or settled directly with the attending physician.

Some question has arisen as to the Review Committee's responsibility for considering "practice patterns," and it is felt that this is an appropriate area for the peer review mechanism. The phrase "practice patterns" is a generally acknowledged euphemism used by insurance carriers to indicate consistently questionable practices, such as routine use of obsolete or outmoded drugs. From a reimbursement standpoint, in these situations, the carrier is asking the Committee's medical judgment on the appropriateness of the medical practice or, in other words, the quality of care rendered.

Not only have the majority of cases been of a length of stay or utilization nature, but a good portion of them have been cases where decisions have been appealed from the local or district committees. The necessity and appropriateness for the appeals procedure cannot be questioned, but some analysis of



the reason for the appeals is in order. Most often, cases are appealed because of the 60 day time limit guidelines used for district committees. If a case is outstanding with a district longer than 60 days, the submitting party has the option of referring it to the State Committee.

The problems confronting district committees with regard to timely meetings can be appreciable, yet the 60 day appeal waiver is equally important to insurance carriers, who must provide timely payment of claims to their policy holders.

The Committee is in the process of trying to fully evaluate the nature and types of appeals and the problems of timeliness, and hopes to work with the district committees in improving the situation.

The Committee would encourage the district review groups to continue to call our attention to problem areas and make suggestions for improvements, because they are the basis for the entire review system. Toward this end, at one of the meetings during the year all district chairmen were invited and asked to express their views or bring up problems they were aware of. This was a helpful experience, and this type of meeting will probably be continued as a routine matter.

As an example, one of the problems indicated by the district chairmen was that they are not aware when a case is finally settled by the carrier. After being contacted, all carriers agreed to send notice to the KMA office, as well as to the district chairmen, that a given claim had been settled and what the final resolution consisted of.

The efforts of each of the Committee members is very much appreciated, and I would like to extend my thanks to all of the members.

Stuart Graves, Jr., M.D., Chairman

## Report of the Committee on Health Care Costs

The KMA Committee on Health Care Costs did not meet in 1979. An Ad Hoc Committee of the KMA Board was charged with developing policy recommendations on health costs for KMA, based on the report of the KMA Commission on Health Care Costs, and the report of that Committee presents the current KMA action in this field.

The issue of cost of medical care continues to be of major interest. The Kentucky Voluntary Effort for Health Cost Containment has begun implementing several programs, and we hope it will be able to demonstrate an impact on hospital costs in the Commonwealth. The National Voluntary Effort exceeded its goal of lowering the rate of increase in hospital costs by two percentage points in 1978. Increased utilization and other inflationary factors, such as energy, were having a negative effect on the program goals the first three months of 1979; recent trends, however, indicate that the program may yet meet its goal for 1979.

Walter I. Hume, Jr., M.D., Chairman

## Resolution N

### Fayette County Medical Society

WHEREAS, the forging of prescriptions and abuse of controlled substances continues to be a significant problem in our country, and

WHEREAS, the Bluegrass Pharmaceutical Association has implemented a "Pharm Alert" plan to control prescription

forgeries and abuse of controlled substances, therefore be it

**RESOLVED**, that the Kentucky Medical Association encourage all county societies in the Commonwealth to support pharmacists in establishing the Pharm Alert system on a statewide basis, and be it further

**RESOLVED**, that the Kentucky Medical Association develop with the Kentucky State Pharmacists Association a formal process for achieving the objective of reporting and acting on possible controlled substance prescriptions forgeries, misrepresentation of illness to obtain controlled substances and abuse of controlled substances, so as to minimize these actions by persons who support or participate in drug abuse.

### Recommendations, Reference Committee No. 4

#### Items for Consent

12. Report of the President, Kentucky Blue Cross and Blue Shield—filed

20. Report of the Advisory Committee to Blue Cross and Blue Shield—Reference Committee No. 4 reviewed the Report of the Advisory Committee to Blue Cross and Blue Shield, Report No. 20, and recommends adoption of the Report with the editorial deletion of the words, ". . . and are consistent with good medical practice" from the paragraph numbered 1. on Page 20.2 as suggested by the Board of Trustees. The revised paragraph would read as follows:

"1. Payments for routine hospital admission tests will be made only when they are specifically ordered by the attending physician."

24. Report of the Claims and Utilization Review Committee—filed

34. Report of the Committee on Health Care Costs—filed  
Resolution N—Prescription Forgeries and Abuse of Controlled Substances (Fayette County Medical Society)—adopted

## Report of the KMA Advisory Committee to KPRO

In the past year, many developments relating to PSROs have occurred both on the national and local levels. The following paragraphs list the most significant ones.

### National

A 1978 evaluation report was released by HEW late last year that found that PSROs have reduced Medicare hospital utilization compared to non-PSRO areas. The report concluded that the PSRO program's concurrent review activity more than pays for itself. The report was good news for the often embattled program. It documented considerable progress in the program between 1976 and 1977, when a report was released that was critical of PSRO impact; the 1978 report was able to draw a great deal more to reach its conclusions.

The controversy over whether PSROs are Federal agencies has continued since a lawsuit was filed to gain access to profiles compiled by the National Capitol Medical Foundation. The request was based on the Federal Freedom of Information Act, which governs requests for information from Federal agencies. A court decision holding that PSROs are Federal agencies was appealed by the PSRO; meanwhile, an amendment to exempt PSROs from the Freedom of Information Act apparently was caught in the legislative crunch and failed to pass. It will be re-introduced in 1979.

Congressional confidence in PSROs was boosted by the 1978 evaluation report and a subsequent report on PSRO impact by

the Congressional Budget Office; nevertheless, the program will be operating under significant financial restraints in the coming year due to a Congressional mandate of \$8.70 per review. KPRO expects to keep within those financial guidelines by increasing the efficiency and effectiveness of review and stepping up focused review.

As of this writing, every area of the United States except one (Nebraska) has succeeded in putting in place a PSRO. The past year has also seen the first PSRO terminations by HEW for inadequate review performance, violations of guidelines, or financial mismanagement. Among the PSROs whose funding was terminated were the Calumet Area PSRO in Indiana and the Nashville, Tennessee PSRO. It is important to note that in the terminated areas there will definitely still be PSROs; but they may be staffed without local physician input and control if cooperation from local physicians cannot be obtained.

Over 50 PSROs around the country have begun to review long-term care activities. As noted in a meeting of the National Professional Standards Review Council, PSROs need to be reminded that long-term care has unique characteristics—long length-of-stay, high staff turnover, the emphasis on Medicaid—that make the hospital model inappropriate for the nursing home.

#### Local

With enough data on hand to obtain valid results, KPRO wrote its own impact study in April, 1979, comparing the peer review process in 1977 and 1978 with 1976, when peer review was not yet in place. The study found that net savings of the program, after adjusting for review and other costs, totaled \$4,465,165.

KPRO was among the PSROs undertaking long-term care review in 1979; SNF and ICF facilities came under binding review in June 1979. Free-standing ICF facilities are being reviewed by the Kentucky Department for Human Resources until a formal administrative agreement is signed providing for review of these institutions by KPRO. The long-term care process was carefully planned before implementation and no major problems have occurred since review became binding.

KPRO adjusted its criteria to harmonize with the institution of ICD-9CM, the new disease classification for clinical use which became effective in early 1979. At the same time, KPRO revised LOS assignments in a major revision of the review process. Instead of following the PAS length-of-stay norms, KPRO instituted a process by which the Health Care Coordinator reviews the initial admission on or before the fourth calendar day of the patient's admission to the facility. The HCC is then authorized to assign successive lengths-of-stay in increments of four, up to a maximum of 12 days. The new system was put into operation to save between 20% and 30% of the HCC's time needed to conduct review. Some exceptions have been made to the four-day format in the case of certain long-term procedures or diagnoses, such as fractured femur and myocardial infarction.

KPRO's MCE staff is charged with providing technical assistance to hospitals in carrying out their audit obligations. In addition, the MCE staff performs MCE studies in hospitals which are non-delegated for that purpose. MCE Regional Audit Committees, composed of area physicians, have been set up in regions of the state to write criteria for use in non-delegated MCE studies, review the results of MCE studies and make recommendations based on those results. Concerning delegated hospitals, the KPRO Board voted to require every hospital

delegated for MCE studies to have a written audit plan which will serve as the hospital's official policy statement for MCE studies.

A most important step undertaken in the past year was the first application of focusing techniques in the hospital review process. Focusing is a technique for exempting certain areas from day-to-day concurrent review if data indicate that review is no longer necessary in those areas. KPRO approached focusing in the following three ways: by hospital, by physician or by diagnosis. To date, a total of 393 physicians (32,298 potential discharges) have been focused out. This procedure reduces the overall cost of review while exempting areas that no longer need review.

A number of private insurance companies have made contacts with KPRO to discuss providing KPRO review for privately insured patients. A number of these contacts were made as early as July of 1977. Since 1977 the KPRO Board of Directors has had private review under intensive discussion and they have continued to review numerous contacts from private organizations. While KPRO has not encouraged or solicited review arrangements with private insurance carriers, there has been a concern that these same private carriers might establish competing review systems within Kentucky hospitals. The KPRO Board felt that the establishment of competing review systems within Kentucky hospitals would be both confusing for hospitals and physicians as well as offensive to the majority of physicians. In view of the Board's desire to keep patient review systems under one set of rules, there has been some consideration given to the implementation of private review by KPRO. Although no private review has begun, it is anticipated that a pilot program might begin in a few selected hospitals late in 1979.

KPRO's data system is now providing several reports to hospitals and chairmen of hospital medical staffs in Kentucky. One of these is the hospital profile—sent quarterly—which contains discharge summaries, LOS summaries, continued stay recaps, reasons for extension of LOS and review personnel summaries. The profiles have three sets of statistics—those for the individual hospital, those for all hospitals in a certain cluster group (hospitals of the same general size and circumstance), and those for all hospitals in the state. Another report is the clinical procedures, complications, extensions of LOS, etc. Reports are broken down into the same three sets of statistics as with the hospital profile. Both reports mentioned here are excellent sources for identifying MCE topics and continuing medical education ideas. In addition, KPRO produces error reports, for monitoring the system, and planning profiles to assist the Health Systems Agencies in performing their planning functions. In all of these reports, confidentiality has been assigned the highest priority, and all reports are governed by the strictest possible confidentiality standards, with every KPRO staff member signing a confidentiality pledge.

#### Conclusion

The PSRO program, both nationwide and in Kentucky, has accomplished much in the past year. Physician involvement in the planning and implementation of PSRO activities has made the concept work; without that involvement, and the participation of the hospitals and long-term care facilities of the state, many things would not have been accomplished. So long as the physician and hospital communities cooperate to make the program work, there will be no threat to the viability of a



peer review network set up and operated by local physicians. This is the best—and the only—alternative to the tired old chestnut that says the best thing to do is ignore PSROs by refusing to participate and PSROs will go away. In that event, the only thing that might go away would be a **Kentucky physician-run PSRO**. KPRO hopes to be able to attract more members in the coming months; membership is open to all practicing physicians who sign a card stating that they approve of KPRO as the PSRO for Kentucky and will cooperate in its activities. We extend our thanks and appreciation to those Kentucky physicians, some 59% in number, who are members and have given of their time and effort and expertise in the past months to make peer review work.

Gabe A. Payne, M.D., Chairman

#### Recommendations, Reference Committee No. 4

Reference Committee No. 4 reviewed Report No. 41, the Report of the KMA Advisory Committee to KPRO. The Chairman of this Committee attended the Reference Committee meeting and answered questions concerning his Report.

The Reference Committee recommends that the Report be filed.

A motion was made, seconded and carried that the Reference Committee's recommendation be accepted.

## Report of the Ad Hoc Committee on Health Care Costs

### Board of Trustees

### Special Report A

The KMA Board of Trustees established the KMA Commission on Health Care Costs in the Spring of 1977. The Commission was composed of 38 members representing providers, consumers, commerce and industry leaders, labor, third parties, government, and the communications media. The Board of Trustees gave the Commission the charge of studying the report of the National Commission on the Cost of Health Care, established by the American Medical Association, and to evaluate its recommendations as they might apply to Kentucky. This task was carried out and a report of the Commission was developed and submitted to the KMA House of Delegates' consideration in September, 1978. The report was submitted to the House shortly before the meeting took place and, as a result, the House did not feel it had adequate time to fully study and digest the report.

As a result, the report was referred to the KMA Board. The Board accepted the Commission's report with thanks and filed it for information. In addition, the Board appointed the Ad Hoc Committee on Health Care Costs, composed of Carl Cooper, Jr., M.D., KMA President; Robert S. Howell, M.D., KMA President-Elect; Walter S. Coe, M.D., 5th District Trustee; R. J. Phillips, M.D., 2nd District Trustee; with myself as Chairman. Walter I. Hume, Jr., M.D., Louisville, Chairman of the KMA Commission on Health Care Costs, was an ex-officio member of the Committee. The Ad Hoc Committee was asked to develop a report from which KMA could develop policy concerning the complex issue of health care costs.

It is estimated that over 90% of the citizens of Kentucky have some kind of third party insurance coverage. Through the years, people have come to rely on third parties to pay

most of, or all of, the health care bill. Because of that dependence, a significant number of consumers do not understand the effect of utilization on costs and there is little incentive for them to become aware of that relationship. It was felt by our Committee that if the patient is made more aware of the cost of the care he or she purchases, even the patient may not pay for it directly, some impact will be made.

Thus, to strengthen price consciousness in the presence of insurance:

1) Coverages offered should be clearly written to reflect what is being purchased and at what cost. Alternative coverage plans (group and individual) should be offered in the marketplace and be available to all consumers.

2) All insurance policies should encourage consumer cost consciousness. While no one type of coverage plan was felt to be outstanding in encouraging cost consciousness, incentives discussed included premium rebates for non-utilization; greater usage of co-payment or deductible plans; coordination of benefits; the limiting of first-dollar coverage and consumer education programs.

3) KMA recognizes the pluralistic nature of health care delivery and endorses a free enterprise approach to such care. KMA encourages an objective assessment of HMOs, including IPAs and other group arrangements, with respect to their impact on access, quality and cost of health care.

4) Consumers, we felt, should be encouraged and assisted to become more active and knowledgeable participants in making health care utilization decisions. The Committee would urge that KMA encourage the development of health and patient education programs drawing on expertise of providers, third parties, and the communications media and implement it through existing advertising and public information mechanisms.

5) KMA should encourage the emphasis of self-help programs directed at well and worried-well individuals to enable them to make the initial decision as to whether or not provider care is necessary as opposed to self care, bed rest, or the use of non-prescription drugs or first aid. Such educational efforts should be provided not only by the medical community, but by other segments of the population since health costs are a problem to all society.

6) It is felt that costs can be contained in health care by reducing the need for a service through the development of more healthful lifestyles and the early detection of conditions which may permit lower cost therapy. KMA should be on record of supporting efforts to educate and motivate consumers to adopt more healthful lifestyles.

7) The Committee also suggests that KMA encourage the exploration of methods of using public communications more effectively and health education efforts directed toward motivating consumers to adopt healthier lifestyles.

8) The providers of care must also become more price conscious. As purchasers of health care for our patients, physicians must carefully weigh the benefits to be derived from a test or procedure before ordering it performed, and must take steps to make cost-effective utilization recommendations without sacrificing quality of care. We would encourage providers, working at the local level, to develop mechanisms for sharing diagnostic findings for a given patient to avoid duplication of extensive tests and procedures. Research should be undertaken to determine cost efficacy of other innovations such as pre-admission testing, transfer of patients' records between hospitals, weekend surgery, and elimination of mandatory hospital admission tests. We would also encourage the continuing ef-

forts of the medical schools to include graduate level courses in the economics of health care in their curricula.

9) The Committee discussed the recent trend of hospital-based physicians separating their professional component from that of the hospital and billing the patient separately. The Committee felt that if these physicians split their billings from hospitals, the physician's charge should include the administrative cost of billing, plus a professional component, with consideration of the cost of living increment. Physicians should exercise professional fee restraint as exemplified in our Voluntary Effort. KMA will encourage an appropriate reduction in hospital charges to help compensate for instances in which separate billing becomes the policy.

10) Physicians are often called upon to make medical decisions on behalf of their patients. As a result, the professional often faces problems in dealing with pressures for inappropriate care, such as extended hospitalization because of inability of the family to care for the patient, even though hospitalization may no longer be needed. Thus, the medical profession should examine those factors associated with medical practice that lead to inappropriate care, and assume responsibility for informing providers and consumers of their existence and impact.

11) Because health planning now plays such a major role in health care delivery, KMA should continue to monitor and actively participate in the various health planning and regulatory processes currently under way in Kentucky. Unnecessary facilities and services should be reduced or eliminated through the planning process.

12) The Committee believes that for planning to be truly effective, it must apply to government-operated facilities, such as Veterans Administration hospitals, as well as those in the private sector. Kentucky's Congressional Delegation and appropriate state officials should be urged to discontinue the exclusion of state and federal facilities and services from planning guidelines which govern the private sector.

13) Third party carriers should reinforce the planning process by reimbursing only those which comply with accepted planning criteria and standards.

14) The Committee noted that many programs established to effect cost savings are of doubtful cost effectiveness because of "overhead" costs. If controls on revenues, capital acquisition or prices are expanded, attempts using carefully controlled experiments (e.g., introduction of regulation only in a given area) should be made to evaluate their effects before they are totally implemented.

Further, regulation whose rationale is cost containment should exempt organizations or areas where innovations are being tested for the purpose of cost containment or where strategies to increase price consciousness are being pursued successfully.

15) The cost regulations of all kinds, both government and voluntary, have a significant impact on the total cost of care. Attention must be given to the simplification of the regulatory process and to consolidating and reducing the number of inspections, audits, surveys, reports and other mechanisms of enforcement.

16) Reduction or elimination of unnecessary facilities and services must occur. Underutilized facilities should be considered for conversion to meet other health care needs of the communities they serve. Consideration should be given to providing financial assistance, by whatever means available, both private and public funds, for the modification of inpatient

hospital services to other health purposes. It is felt this may result in less cost in the long run than continued maintenance of underused acute care facilities.

17) Health care costs are a function of both charges and utilization, with the added complexity of new technology thrown in. Restraint should be exercised by health care providers to attempt to keep the rate of escalation of charges more closely in line with increases in inflationary trends. KMA is aware of and supports the Voluntary Effort, which is addressing hospital cost issues, and the positive posture taken by the leadership of the AMA and KMA in calling for individual physicians to voluntarily restrain the rate of professional fee increases.

18) The question of physician supply was discussed. Research has shown that physicians, for many reasons, tend to locate in the urban centers of this country and not necessarily where their services are most needed. Greater efforts should be made to develop incentives to motivate physicians to locate in underserved areas.

19) Further emphasis and expansion of the Area Health Education System in Kentucky should be encouraged. This program places students in rural areas for a portion of their undergraduate clinical experience. The efforts of the Rural Kentucky Medical Scholarship Fund to help motivate physicians to locate in rural areas of Kentucky is noted and endorsed.

20) Increased specialization in non-primary specialties has the effect of discouraging physicians from locating in those underserved places that are likely to be some distance from centers of learning and related support facilities. Research has shown that family practitioners tend to respond differently than other physicians in various location forces. Thus, an increase in primary care physicians might lead to a more equal distribution of physicians and the Committee recommends that KMA encourage the State of Kentucky to continue to emphasize the further development of primary care physicians, of which family practice is one segment, by training more primary care physicians. KMA should continue to monitor the modification of limitations on allied health professions, particularly in primary care settings, to assure continued quality of care.

I very much appreciate the participation of the Committee members in the development of this report and particularly the assistance and experience of Doctor Walter Hume, who has been at the forefront of KMA's efforts to deal with health care costs for the past four and one-half years.

Dwight L. Blackburn, M.D., Chairman

#### **Addendum To The Report of The Ad Hoc Committee on Health Care Costs**

The Ad Hoc Committee was also asked to study the proposed Medical Necessity Project of the Blue Cross and Blue Shield and make a recommendation to the Board of Trustees. The Medical Necessity Project has been proposed by the National Blue Shield Plan but must be implemented by each individual Plan. Essentially, the Medical Necessity Project will discontinue paying for admission tests unless they are specifically ordered by the attending physician. Your Subcommittee was in total agreement with this concept and unanimously recommends its endorsement.

#### **Recommendations, Reference Committee No. 4**

Reference Committee No. 4 has reviewed Special Report A,



from the Report of the Chairman of the Board of Trustees, entitled Report of the Ad Hoc Committee on Health Care Costs, and appreciates the great amount of work that has gone into the development of the conclusions and the preparation of this Report. We recommend adoption of this Report.

A motion was made, seconded, and carried that the Reference Committee's recommendation be accepted.

## **Report of the Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement**

Resolution L, submitted by the Campbell-Kenton County Medical Society, and Resolution Q, submitted by the Pulaski County Medical Society, were passed as amended by the House of Delegates in September, 1978.

Resolution L called on the Board of Trustees to appoint an Ad Hoc committee on medical insurance problems. That committee was to make contact with Blue Shield and other health care insurers and hold at least one well publicized meeting, at which any KMA member could appear to discuss specific problems relating to health care insurance, to include: The desirability of maintaining the category "participating physician" with regard to Blue Shield insurance; the desirability of establishing a category "participating physician" with other medical insurers; the method of reimbursing physicians by assignment of fees as it relates to all medical insurance companies; the relative merits of varying types of insurance coverage and the feasibility of making patients more aware of the various coverages available.

Resolution Q directed the Committee to undertake a complete study of the reimbursement system used by third party payors to remove imbalances in the payment for primary care as compared to non-primary care services, and to study the composition of the KMA Advisory Committee to Blue Cross-Blue Shield with regard to the representation of primary care physicians.

Because the resolutions dealt with similar subjects, the House directed that this Ad Hoc Committee be appointed to consider the issues raised in both.

Resolution L directed the Committee to report its findings to all members of the House of Delegates prior to the next session of the House, which will be held in September, 1979. To satisfy this direction from the House, the report will be published in the *KMA Journal*. The report is divided into separate sections for Resolutions L and Q. Although the House did not direct that Resolution Q be published, it, too, will be included in the *Journal* for information.

The Committee was appointed by the KMA Board of Trustees at their December, 1978 meeting. It is composed of an equal number of proponents and opponents of the issues raised in Resolutions L and Q. The members, in your Chairman's view, showed great objectivity and integrity in addressing these complex and emotional issues, and freely give a considerable amount of their time and ability in developing the Committee's findings.

### **Resolution L**

Under the direction of the Chairman, background work was begun to obtain information from Blue Shield on the events leading up to cessation of payment to non-participating physi-

cians; the administrative operation of the UCR program; and the types of coverage offered. Contact was made with representatives of the Health Insurance Association of America (HIAA), a voluntary organization of the major for-profit health insurers in the country, to determine coverages offered and reimbursement procedures.

Information was sought from the AMA and other state medical associations on related experiences they had, and contact was made with the State Insurance Commissioner's office for information related to the issues contained in the resolutions. Material was received and considered, too, from primary care physician groups.

The Committee conducted a hearing open to the membership on April 1, in Louisville. The Committee agreed that it should act as a fact-finding hearing group for purposes of this meeting. All members present wishing to speak on April 1 were given the opportunity. Both Resolutions L and Q were considered at the April 1 meeting. The Committee went into executive session after the open hearing to review the material presented in the meeting, and a final meeting of the Committee was held in May. Representatives of Blue Shield and the HIAA attended our May meeting to discuss areas of concern voiced by the KMA members at the open hearing.

The topics addressed to the Committee during the April 1 meeting included:

- The historical development of and relationship between KMA and Blue Cross-Blue Shield;
- Aspects of participating and non-participating medical insurance reimbursement agreements as relates to patients, physicians and insurers;
- Differences in coverage by insurance policies of surgical as compared to primary care services;
- The role and composition of the KMA Blue Cross-Blue Shield Advisory Committee;
- Public/policy holder awareness of insurance coverage and types of insurance available;
- Patient assignment of benefits;
- Insurance billing procedures and problems experienced by physicians;
- The role of peer review as relates to insurers;
- Socialization of medicine and cost containment issues;
- The development of insurance coverage and policy procedures as a result of collective bargaining;
- The responsibility of the insurance company to the patient, physician and payor;
- The right of the patient to choose a physician or physicians to provide care and to choose insurance coverage payment for as much concurrent care by surgical and consulting, and primary care physicians as the patient considers necessary.

To reiterate, differentiation between the issues raised in Resolution L and Resolution Q was difficult, as they overlap in many areas. For purposes of this report, however, an attempt has been made to consider them separately. With regard to Resolution L, the Committee makes the following recommendations:

1. Because 80% of Kentucky physicians have signed Blue Shield participation agreements, the Committee recommends that this category be maintained.

2. The Committee recommends that KMA continue to make its peer review mechanism available on the same basis to all insurers that offer a Usual, Customary and Reasonable program.

3. a. *Voluntary patient requests for assignment of physician reimbursement should be honored by all insurance carriers.*

b. *This policy should be followed with the understanding between the physician and the patient that the amount submitted to the carrier is the full fee charged to the patient.*

c. *KMA should reaffirm its position that any insurance carrier providing a Usual, Customary and Reasonable program to Kentucky subscribers may submit fees falling outside the insurer's established guidelines to a peer review mechanism, such as that made available by the Kentucky Medical Association, regardless of whether the fee is charged by a participating or non-participating physician.*

4. *The Committee recommends the endorsement of appropriate AMA publications describing types of health insurance coverage to physicians in the state who wish to purchase them for the benefit of their patients.*

### Resolution Q

The Committee made a number of observations about medical insurance from the information mentioned in the section of the report on Resolution L, and relied heavily on material that was supplied by representatives of Blue Cross-Blue Shield and HIAA, as well as earlier material received from primary care physicians.

The consumer market (the ability to buy a given service for a given price) has obviously had the strongest influence on most coverages now being bought. Most of the health insurance benefits now in effect were developed to meet the desires of the consuming public. Thus, in a free and competitive market, carriers can sell only what people will buy, even though the coverages may be inadequate. Moreover, benefits cannot be revised unless the purchasers of insurance want or can pay for changes.

Health insurance was initially designed to cover basic hospital and surgical costs. Although a significant amount of the coverage currently in force has not kept pace with changing trends in medical practice, particularly in the areas of primary and non-surgical care, the Committee feels that changes will occur to accommodate these new trends as patients become more aware of the desirability of more comprehensive coverage. Thus, one priority should be to make people aware of the coverages they have under existing contracts and additional coverage which they might acquire.

Most all insurance carriers will market any type of coverage insurance purchasers desire, including "first dollar" coverage, coverage for primary care services, preventive care, family planning and so forth. In fact, some policies presently sold do provide coverage for these services; they are a portion of some basic policies; and are offered as riders to existing policies. Many are covered benefits under major medical insurance.

In Kentucky, most health insurance plans are group plans. As a result, a tremendous impact is made on the type of insurance coverage available, which is totally outside the influence of the individual patient. This is particularly evident on policies for large employee groups, which are negotiated by management and labor.

During labor negotiations, health insurance coverage is one of the many negotiable benefits and must be considered by the bargainners on both sides of the table, along with basic pay, vacation days, sick leave time, and so forth.

Given this situation, it's logical that many individual insurance recipients aren't aware of the types of insurance avail-

able, or even their specific coverage, as opposed to the types of medical services they are most likely to need. Likewise, given the volume and diversity of policies sold (522 companies writing 2400 different policies), it's not difficult to appreciate the confusion the patient/policy holder is confronted with if purchase options are available to him.

The following recommendations are made with the hope that they will encourage changes in the reimbursement system which will be of benefit to all Kentuckians:

1. *KMA should urge carriers to do a better job of explaining health insurance coverages and encourage employers to do a better job of explaining benefits to employees. Insurance companies should advise individual policy holders of coverages.*

2. *KMA should urge all carriers to make a reasonable effort to develop and market broader coverage plans to include provisions for primary care. KMA should actively support these efforts.*

3. *KMA should undertake an educational program on insurance coverages, perhaps in the form of pamphlets in physicians' offices or enclosures for statements, and make an effort to better educate office and hospital administrative personnel on what coverages are.*

4. *KMA should work with the State Insurance Commissioner to urge carriers to make greater effort to cover primary care service and help create a greater awareness of individual policy coverages.*

5. *KMA should encourage and support continued experimental programs to prevent retroactive denial of diagnostic admissions. KMA should encourage reliance on medical review systems to help determine instances of questionable medical conditions, as opposed to true diagnostic admissions.*

6. *KMA should work with insurers to make pre-existing condition determinations more flexible so that patients with chronic conditions won't be penalized, or acute conditions not be covered, through no fault of the policy holder.*

7. *KMA should request the KMA Committee on State Legislative Activities to investigate Kentucky health insurance laws with regard to policy modifications, and attempt to determine if legislative action would be desirable and appropriate to change policies with greater ease, keeping in mind quality of care and the range of financial resources available to Kentucky citizens.*

8. *KMA should urge business and labor to allow a greater employee/member input into the selection of health insurance coverage.*

9. *KMA should work with insurers and urge them to develop primary and surgical coverage for concurrent care for hospitalized patients.*

10. *KMA should work with insurers and the Insurance Commissioner to determine the feasibility of upgrading the physician service benefit portion of indemnity contracts.*

11. *KMA, working through insurers and the Department of Insurance, should encourage the development of simplified claims processing procedures.*

### Other Recommendations

With regard to the role and composition of the Blue Cross-Blue Shield Advisory Committee, it was noted that the changing nature and scope of health insurance, generally, would suggest an expansion of this group's activities.

1. *The Committee would suggest, therefore, that the present name be deleted and changed to reflect this expanded role; e.g., Health Insurance Committee.*



2. As part of this reformation, the Committee recommends that the composition should be changed to be more representative of all specialties, according to the number of specialists in each category in the state.

3. The efforts of such a Committee cannot be representative unless each member faithfully attends meetings. For this reason, the Ad Hoc Committee strongly urges anyone appointed to come to the meetings or not accept the appointment.

4. The Committee further recommends that the recommendations made with regard to Resolution Q be referred to the newly constituted committee for implementation.

I would urge the attention of the House of Delegates and its appreciation of the effort this report represents. The input of the Committee members, together with material from the open meeting and from other sources, resulted in a full airing of these issues, I feel. I would particularly like to express my thanks for their sincere and honest approach to a difficult task to: Carl Brueggemann, M.D., Covington; Glenn W. Bryant, M.D., Louisville; Kenneth P. Crawford, M.D., Louisville; Bennett L. Crowder, II, M.D., Hopkinsville; Harold D. Haller, M.D., Louisville; Ronald Hamilton, Jr., M.D., Lexington; Thomas Heavern, Jr., M.D., Highland Heights; Fred C. Rainey, M.D., Elizabethtown; Nelson B. Rue, M.D., Bowling Green; and Robert S. Tillett, M.D., Louisville.

I would like to personally thank the members of the staff of KMA who so ably assisted me throughout the entire undertaking of this difficult task. In particular, Mr. Robert Klinglesmith and Mr. William Applegate are to be commended for their timely advice and most welcome assistance in setting up and conducting the meetings, and especially in preparing this report.

James A. Baumgarten, M.D., Chairman

#### Recommendations, Reference Committee No. 4

Reference Committee No. 4 has reviewed the Report of the Ad Hoc Committee on Insurance Procedures and Primary Care Reimbursement and recommends adoption of this Report with the following changes and amendments:

Page 7, Paragraph 5, Line 4—The word "conditions" should be changed to the word "admissions."

Page 8, Item No. 2 should be amended to read as follows:

"2) As part of this reformation, the Committee recommends that the composition should be changed to be more representative of all specialties and should give increased representation to primary care physicians. Two recognized factors with regard to Committee composition should be an orderly member rotation process and the avoidance of appointment of a health insurance board member to the Committee."

The Reference Committee wishes to commend the Chairman and Committee members for both the scope and quality of their work with regard to this activity.

A motion was made, seconded, and carried that the recommendations of the Reference Committee be accepted.

William B. Monnig, M.D., Delegate from Kenton County, was recognized who proposed a substitute for subparagraph (1) under the heading "Resolution L" on page 4 of the Reports Book as follows:

1) Because signing third party participation agreements is a voluntary prerogative of each individual physician and because the KMA prefers to set no policy that might in the future be construed by outside interests as interfering with the free marketplace concept of medical care, the KMA henceforth should

not associate itself in the name or deed with the Participating Physician Agreement of Blue Cross and Blue Shield's UCR Program or any other third party insurance carrier's program.

Considerable debate was heard on the floor of the House regarding the proposed substitute. On a call for the vote, the substitute was approved.

Doctor Monnig was again recognized who proposed the addition of subparagraph (5) under the heading "Resolution L" on page 4 of the Reports Book. Doctor Monnig's proposal was subsequently modified from the House floor, and on a call for vote, was adopted as follows:

5) To eliminate any possible implication of conflict of interest between the KMA or its elected representatives and third party health insurance carriers or their boards of directors by outside agents (whether from the private sector or the government sector), the KMA should establish as policy that no member of the Executive Committee, Board of Trustees, or staff may simultaneously be a member of the board of a third party health insurance carrier.

## Resolution K

### Pennyrile Multi-County Medical Society

WHEREAS, the Pennyrile District Utilization Review Committee has recently been requested to review the appropriateness of patient care by certain physicians (with the request coming from an insurance company), and

WHEREAS, this is apparently a new concept for any insurance company to request this type of review by the District Utilization Review Committee, and

WHEREAS, the District Utilization Review Committee expressed strong disapproval of this type of request and requested that the Pennyrile Medical Society relay this information to the KMA, and

WHEREAS, to the best of our knowledge, this type of review has never before been discussed, endorsed or approved by the Kentucky Medical Association, now therefore be it

RESOLVED, that the Kentucky Medical Association go on record as being opposed to this type of review activity carried on through the District Utilization Review Committee.

#### Recommendations, Reference Committee No. 4

Reference Committee No. 4 reviewed Resolution K, introduced by the Pennyrile Multi-County Medical Society, Subject: Function of District Utilization Review Committees. Testimony revealed that inappropriate entry to the review process by a third party carrier occurred. The Board of Trustees recommends, with the concurrence of the Pennyrile Multi-County Medical Society delegates, that the "RESOLVED" of Resolution K be amended to add after the word "Committee," the words, "unless initiated through proper KMA channels." As amended, the "RESOLVED" will read:

"RESOLVED, that the Kentucky Medical Association go on record as being opposed to this type of review activity carried on through the District Utilization Review Committee, unless initiated through proper KMA channels."

Reference Committee No. 4 recommends adoption of Resolution K as amended.

A motion was made, seconded, and carried to accept the Reference Committee's recommendation.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 4 as a whole as amended. (The motion was seconded and carried.)

Mr. Speaker, I would like to express my sincere thanks and appreciation to the members of this Committee in the preparation of this Report.

#### REFERENCE COMMITTEE NO. 4

Glenn W. Bryant, M.D., Louisville, Chairman  
Peter P. Bosomworth, M.D., Lexington  
Cecil D. Martin, M.D., Carrollton  
William B. Monnig, M.D., Erlanger  
Nelson B. Rue, M.D., Bowling Green

#### REFERENCE COMMITTEE NO. 5

*Robert E. Smith, M.D., Covington*  
*Chairman*

Reference Committee No. 5 considered the following reports and resolutions:

18. Report of the Committee on Maternal and Child Health
27. Report of the Committee on Medicare and Other Governmental Medical Programs
28. Report of the Committee on HSAs
29. Report of the Technical Advisory Committee on Physician Services (Title XIX)
31. Report of the Committee on Community and Rural Health
32. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports
- Resolution D—Functions of Boards of Health (Nelson County Medical Society)
- Resolution F—Medicare Reimbursement Areas (Floyd County Medical Society)
- Resolution G—County Board of Health Non-Medicaid Screening Programs (Pulaski County Medical Society)

Reference Committee No. 5 reviewed the following reports and Resolution and recommends they be adopted or filed as indicated, by the consent of the House, without discussion:

#### **Report of the Committee on Maternal and Child Health**

The Committee on Maternal and Child Health, during this Associational year, has devoted much of its effort to reviewing and critiquing previous activities of the Committee and developing and planning new methods and approaches to the maternal and child health activities of the Committee.

Primarily, the Committee reviewed in detail the 35 site visits previously made to Kentucky hospitals. These site visit reports and recommendations were evaluated and recommendations mailed to hospitals in August. While the Committee considers these reports confidential, it is the prerogative of the hospital to either retain these reports or to disseminate the information at its discretion.

The Committee has again undertaken site visits to those hospitals requesting review and will be resurveying hospitals that were previously reviewed if they desire an updated evaluation. We are in the process of updating our material, revising forms, developing a training program for the site visit teams and assessing the costs of such site visits, which would be borne by the hospital requesting the site visits. We believe this pro-

gram will prepare the teams with the professional expertise to provide a more accurate study of the hospital's staff, equipment and physical plant.

There has been increasing activity by the HSA's in the field of maternal and infant services. Levels of care as designated by the HSA's have been a controversial and lingering problem to those involved in both the delivery and the planning of these services. These restrictions on perinatal care services are just the beginning and will eventually affect all phases and aspects of health care, including surgery, etc. The most controversial aspect of this activity is the use of arbitrary numbers of hospital admissions when designating levels of care, whether it be I, II or III, although the Committee does recognize the necessity of "critical mass" to be quality and cost efficient. The Committee was made aware of the discussions the Committee on HSA's had undertaken with the three area HSA's and concurred with those findings. The Committee has gone on record stating its objections in correspondence to the three HSA's in Kentucky—EKHSA, HSA-W and CORVA—opposing the numbers concept.

During the year the Committee has reviewed several proposals and programs sponsored by the Kentucky Department for Human Resources. Recommendations have been passed on to the KMA Board of Trustees for its consideration and action.

The Committee wishes to express its appreciation to the KMA membership and to the various agencies and groups for their assistance and contributions during the year. My personal gratitude goes to the members of the Committee for their involvement and willingness to participate in this difficult and controversial area of perinatal care. Their dedication and support is deeply appreciated. Furthermore, I appreciate the contribution of all physicians and nurses who participated on our site visit team.

Van R. Jenkins, M.D., Chairman

#### **Report of the Technical Advisory Committee on Physician Services (Title XIX)**

Routine concerns expressed by individual members occupied most of the Committee's effort this year. The Title XIX Committee is a statutory advisory body to the State Medical Assistance Program, and its main role is to represent the profession to the Medicaid administration.

Problems of individual physicians discussed with the Program concerned virtually all areas of medical practice, and the Committee would like to advise of its availability for this purpose. Some of these items included concerns that the forms to be filled out by physicians for reimbursement under the Early Periodic Screening, Diagnosis and Treatment Program were cumbersome and difficult to complete; the problem of obsolete or inappropriate procedural coding for reimbursement; lack of reimbursement for routine procedures and services; and general administrative difficulties physicians were encountering.

In turn, the Committee's advice is routinely solicited by the Program on modifications the Program is considering, and a number of issues of this nature were considered.

At the Committee's request, the Medicaid Program is in the process of publishing a routine physicians' newsletter, which will address changes and new activities that will take place. The Committee's views have been solicited on the requirement that



all prescriptions must be signed by the prescribing physician, including refills, the nature and depth of medical documentation of treatment of Medicaid patients, and related matters.

During the year, the Program removed the limit on prescription dosages, which the Committee found very appropriate, and we have been advised that an increase in reimbursement to physicians for in-patient services from 65% to 70% of allowable Medicare charges will probably occur in the near future.

Because this year marks the end of biennial budget period, the Program began working on what it calls its "Projections Report," where major changes to the Program are considered. The Committee drafted a report on behalf of physicians which was submitted and, in summary, called for payment of full allowable UCR charges; reimbursement for routine office lab procedures; the upgrading of profiles in a more timely manner; payments to physicians for the same services that are reimbursed to facilities, on a reasonable cost basis; attention to low payments to rural physicians; reimbursement to nurse anesthetists employed by physicians; and the Program's continued use of the KMA peer review system in lieu of arbitrary internal review mechanisms.

During the year, a State Task Force on Welfare Reform, appointed by the Governor, asked for the Committee's input and impressions on Medicaid Program, and generally, the same issues listed in the Projections Report were reported.

Similar information was relayed to representatives of the Health Care Finance Administration, Medicaid's parent organization in the Regional HEW Office, at a meeting where KMA was represented by our President.

The Committee feels it important for the membership to realize that, although our group is only advisory in nature, it has, hopefully, had some influence on the Program in the physician's and patient's best interests. Perhaps no major changes were effected, but through the faithful and diligent efforts of the Committee members, some notable improvements were made, we feel. This developed only because of the regular attendance of the members to the quarterly meetings, and the long hours they spent in trying to resolve problems that were presented to them.

Thanks is due, too, to the KMA representative on the Advisory Council, Robert N. McLeod, M.D., who also sits on the Medicaid Formulary Committee.

Harold L. Bushey, M.D., Chairman

## **Report of the Committee on Community and Rural Health**

The Committee on Community and Rural Health had an opportunity to meet once during the past year.

Annually the Committee reviews the State's Alcoholism and Drug Abuse Program to determine what assistance the Association may provide in the dissemination of information to the KMA membership and the public. To help educate the membership on the latest trends in the treatment of alcoholism and drug abuse, the Committee requested the State's Alcohol and Drug Abuse Education Division to exhibit at the 1979 Annual Meeting. The Committee has also recommended to the Scientific Program Committee the name of an excellent speaker on alcoholism for the 1980 Annual Meeting.

The Committee reviewed the communicable disease rates in Kentucky with concern and with particular regard to one—gonorrhea. Since 1973, the gonorrhea rate in Kentucky has

quadrupled and is now the most common disease in the Commonwealth. Some of the contributing factors to this current epidemic is the disease's relative short incubation time, lack of adequate public education and the misdiagnosis of the disease. The Committee published the latest treatment schedule on gonorrhea in the April issue of *The Journal*. The membership is encouraged to utilize this schedule to ensure that adequate treatment is given. The gonorrhea bacteria has developed a resistance to some antibiotics, which, in some cases, requires higher dosages or alternate treatments. The Committee also encourages the members to follow up on their patients' contacts to ensure that re-exposure of these patients is avoided and the spread of the disease is halted.

At the request of the Department of Health, Education and Welfare and the Kentucky Department for Human Resources, the Committee became involved in a drive to raise the immunization rates for all individuals under 15 to the 90% level. The Committee was disheartened to learn that diseases once thought to be near eradication were once again flourishing in the Commonwealth. The current average statewide immunization rate is less than 75%, and, in some individual counties, the rate is below 30%. Ninety of 120 counties fall below the 90 percent level. The Committee has corresponded with the county medical society officers in each of these counties to determine what problems exist and what steps the medical society and local officials are taking to alleviate this problem. Current replies to our request indicate that the appropriate action is being taken to ensure that by the end of this year the 90% level will be reached.

The Committee will continue to monitor these and other programs affecting the community. To facilitate better communications and understanding between DHR and the Committee, we have invited Stanley Hammons, M.D., Chief Medical Officer for Kentucky, to attend all future meetings.

Don R. Stephens, M.D., Chairman

## **Report of the School Health, Physical Education & Medical Aspects of Sports Committee**

The Committee on School Health, Physical Education and Medical Aspects of Sports, in conjunction with the University of Kentucky College of Medicine, sponsored the 8th Annual Medical Aspects of Sports Symposium. The registration for this year's program was in excess of 320. The Committee was responsible for planning the program and initiating the first contacts with speakers. Subsequently, the University of Kentucky's Continuing Medical Education Department makes all further arrangements. Their diligence and hard work is evident in the large registration that has been experienced over the last two years, and we commend them.

The Committee felt that since the program was so readily accessible in Lexington, they should again work with the University of Kentucky's Department of CME and hold the 1980 meeting at the Hyatt Regency Hotel in Lexington. The theme for the 1980 meeting will be "Physical Therapy: Rehabilitation of Athletic Injuries." The theme for this past year's program concerned "Field Side Preparation for Possible Injuries and the Conditioning of Athletes to Minimize Injury," and featured lectures and panel discussions, exhibits and demonstrations.

As Chairman, I represented the Association at the 16th National Conference on Physicians in School, in Chicago. The

meeting was informative, and provided insights into new concepts dealing with health education and physical education.

During the past year the Committee was asked to participate on the School Health Education Coalition, which consists of representatives from the State's professional educational and health organizations. The goal of this organization is to further the course of school health in Kentucky on state and local levels. Representatives of the Committee attended Coalition organizational meetings and related the Committees' support of their concept in teaching health education in the primary and secondary school systems. We also encouraged each community to seek a local M.D. consultant, and if they should have problems in doing so, to contact the Committee for assistance. Also, we requested them to seek the services of the Association in the development of policies and procedures for a comprehensive school health program to insure its medical accuracy.

Last year the Committee reinstated its program of providing a 45 minute presentation on the "Conditioning and Prevention of Football Injuries" at the Kentucky High School Athletic Association Regional Pre-season Football Coaches Training Session. The sessions, which require mandatory attendance by coaches and referees, provided a unique opportunity for the Committee to help educate the coaches of our high school athletes on the proper warning signs and procedures to prevent serious injuries. The Committee wishes to acknowledge the support the KHSAA has given the Committee, and thank them for allowing us to make our presentations.

Another on-going effort that has finally materialized has been the development of a curriculum for sports medicine and its recognition by the University of Louisville, School of Medicine. Ronald Waldrige, M.D., past chairman, has been instrumental in following through with the implementation of this program. The one semester course provides medical students with nine hours of lectures and seventy-two lab sessions, as well as, requiring time spent attending sporting events with a team physician. Registration is already three-fourths full; and it is felt this training will assist future physicians in providing needed medical care, currently lacking in many communities across the State.

I would like to extend the Committee's thanks to William Brooks, M.D. for his superb handling and development of the 8th Medical Aspects of Sports Symposium and to the members of the Committee that assisted him. Also, the rest of the Committee is to be commended for their continuing hard work in developing educational programs to help reduce the number of athletic injuries suffered by our state's athletes.

William G. Wheeler, Jr., M.D., Chairman

## Resolution D

### Nelson County Medical Society

WHEREAS, it is the expressed intent of the Department for Human Resources to expand the function of local health departments into the attempted delivery of primary medical care, and

WHEREAS, proposed fee schedules for such services often exceed the cost of similar services through private channels, and

WHEREAS, such attempts at delivery of care by health departments as currently staffed would require the attempted diagnosis and treatment of patients by non-physicians, thus

violating KRS 311.560 (practice of medicine or osteopathy without license prohibited) and by definition lowering the quality of care, and

WHEREAS, such attempts at delivery of care could only further fragment patient care, now therefore be it

RESOLVED, that the Kentucky Medical Association expresses opposition to the provision of services that further fragment medical care, frequently at greater than reasonable cost, and promote continued fragmentation and lowered quality of care, and be further

RESOLVED, that the Kentucky Medical Association urge the Department for Human Resources to shift its efforts toward strengthening the proper and appropriate public health functions of the local health departments.

### Items For Consent

18. Report of the Committee on Maternal and Child Health—Filed

29. Report of the Technical Advisory Committee on Physician Services (Title XIX)—Filed

31. Report of the Committee on Community and Rural Health—Filed

32. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports—Filed

Resolution D—Functions of Boards of Health (Nelson County Medical Society)—Adopt

## Report of the Committee on Medicare and Other Governmental Medical Programs

The House of Delegates has been directly concerned with the issue of reimbursement for physician services by the Medicare Program for over two years. This subject has been addressed now during three regular sessions and one special session of the House of Delegates, and the Committee on Medicare and Other Governmental Medical Programs was directly charged by the House to study the matter further.

A portion of this charge also directed that the Committee be reconstituted to consist of equal representation from each of the three areas recognized by the Medicare carrier for payment purposes. The Committee was specifically charged to survey other states to determine payment methods used, to investigate the problem of Medicare reimbursement areas, and to report to the Board of Trustees prior to the 1979 meeting of the House.

Contact was made with several surrounding states, and each was asked the number of payment areas established in each state; the percentage of Usual, Customary and Reasonable fees paid; whether there were any special programs related to physician reimbursement being conducted by Medicare in each state; and other comments.

The responses varied with the exception that all states reported that reimbursement was essentially based on the 75th percentile of allowable charges for each payment area.

Physicians in two states, Tennessee and South Carolina, are reimbursed on a single payment area, the entire state, and personal contacts were made with representatives of the medical association in each state.

In Tennessee there is, apparently, a mixed reaction to the single area reimbursement method, even after it has been in



effect for a year. Information from Tennessee indicated that no clear-cut effect could yet be seen since going to the single area method of payment.

Single area designation in South Carolina has been more recent. There, differences in payments to specialists are recognized, and payment is based on the 75th percentile of fees charged in 1975, or the individual profile charge, whichever is lower.

The single consistent reaction in all states was that each has faced a situation very much similar to the one being faced in Kentucky.

Next the Committee contacted the Medicare carrier, Metropolitan Life, about the designation of the Medicare payment area in Kentucky. It was the carriers' prediction that if the state were changed to a single reimbursement area, total Medicare reimbursement to the state would be less than is now being paid using the three areas. The carrier further predicted that the result would be a decrease in physician reimbursement in Area I, little change in Area II, and a general increase in Area III.

Similar contact was made with representatives of the Health Care Financing Administration in the Regional Office of the Department of Health, Education and Welfare. This was followed by some personal contact by officers and staff, and essentially the same information was imparted as that given by the carrier. The Regional representatives stated that change to a single statewide area would result in decreases in payment for most procedures performed by urban physicians, and some increase in payments to rural physicians, though not for every procedure performed by every rural doctor.

In the studies it was stated a number of times, both in print and verbally, that HEW had been giving considerable attention to the disparity in payments to rural physicians and intended to resolve this problem through a number of legislative and regulatory channels. This issue is interrelated with a number of other HEW goals, but the major objective was to seek legislative change.

Legislative modification to the law has been proposed several times in the past, and the current proposal receiving the most attention is S. 505, sponsored by Senator Herman Talmadge (D-Ga.), which would change both the Medicare and Medicaid Programs substantially. Included in this bill's provisions are qualifications to the reimbursement method, which would essentially base payment to physicians on single state areas.

To assist the Committee's work, information was developed on the number of physicians practicing in each area by specialty, together with the number who accept assignment under Medicare, who treat Medicare patients, and who treat Medicaid patients. This information follows in summary form.

("Primary Care" includes internal medicine, pediatrics, OB-GYN, family practice and general practice. The "Other" category includes public health, physical medicine and administrative medicine. The source for this information was the Kentucky State Board of Medical Licensure—May 23, 1979. Numbers—by specialty—are based on practitioner-reported specialty.)

|          | Primary Care | Surgery   | Medicine  | Other   | Total |
|----------|--------------|-----------|-----------|---------|-------|
| AREA I   | 45% (1065)   | 24% (553) | 30% (708) | 1% (27) | 2353  |
| AREA II  | 54% (727)    | 23% (313) | 22% (292) | 2% (22) | 1354  |
| AREA III | 72% (582)    | 15% (120) | 12% (94)  | 1% (8)  | 805   |
|          |              |           |           |         | 4512  |

From this background work, it is apparent that one of the keys to the problem rests with the fee definitions used by the Medicare Program, and these are compared, as follows, with the standard definitions recognized by KMA.

**Medicare Definitions:** Actual Charge—The full or actual fee a physician charges for a service. Customary Charge—The median of all fees charged by all physicians for a given procedure in a given area (one-half of all fees are above the median, and one-half are below). Prevailing Charge—The 75th percentile of Customary charges, weighted by the number of times the service was performed by physicians in the same specialty and in the same locality.

**KMA Recognized Definitions:** Usual Charge—The fee usually charged by a physician for a given service (compares with Medicare "Actual" charge). Customary Charge—The charge within the range of "Usual" fees charged by the physicians of similar training and experience for the same service. Reasonable Charge—A charge that meets the definitions for both "Usual" and "Customary", or is justifiable considering the special circumstances of the particular case.

For purposes of actual payments, Medicare law requires the carrier to pay the lowest of the charge definitions. Medicare reimbursements are updated at the beginning of each fiscal year, using fees charged the previous calendar year.

At its final meeting, the Committee considered and further discussed all this material, and developed the recommendations listed at the end of this report.

Thanks is due to the Committee members for their sincere efforts and willingness to work together on this difficult and controversial issue.

Paul J. Parks, M.D., Chairman

## RECOMMENDATIONS

1. KMA should urge the Medicare carrier to begin paying all Kentucky doctors the same percentage of the actual fee charged, on the UCR concept, to be upgraded annually.

2. KMA should urge the Department of HEW to base the prevailing charge calculation in Kentucky on actual fees submitted by all physicians in the state.

3. If these recommendations are accepted, KMA should review the situation and attempt to determine the effect of this change one year after it has been initiated.

### Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Medicare and Other Governmental Medical Programs and listened to lengthy discussion on this report. The Committee would like to commend Doctor Parks and his Committee for their excellent work.

Reference Committee No. 5 recommends that this Report be adopted.

A motion was made, seconded, and carried to accept the Reference Committee's recommendation.

## Resolution F

WHEREAS, the payment system under Medicare Part B for the Commonwealth of Kentucky is discriminatory in that it pays three different scales depending upon geographic location, and

WHEREAS, it is no longer true that the higher per capita income, cost of living or cost of supplies, etc. is found only in metropolitan areas, and

WHEREAS, the present reimbursement system represents discrimination among physicians based on artificial and inadequate reasons, and

WHEREAS, other states have successfully ended this inequity by making their states a single payment area, and

WHEREAS, for a number of years the House of Delegates of the Kentucky Medical Association has voiced the desire to see the Commonwealth of Kentucky treated as a single payment scale area, and

WHEREAS, resolutions have been passed by the Kentucky Medical Association House of Delegates in previous years instructing the Board of Trustees to attempt to resolve the Medicare inequities, now therefore be it

RESOLVED, the 1979 Kentucky Medical Association House of Delegates adopt as policy, that for the purpose of Part B Medicare reimbursement, the Commonwealth of Kentucky should be considered as one payment area.

#### **Recommendations, Reference Committee No. 5**

The Committee next considered Resolution F on Medicare Reimbursement Areas, introduced by the Floyd County Medical Society. This Resolution was discussed at great length and was felt to be redundant with the adoption of Report No. 27. Therefore, the Reference Committee recommends that this Resolution be rejected.

A motion was made, seconded, and carried to accept the Reference Committee's recommendation.

## **Report of the Committee on HSA's**

The HSA Committee continued to monitor the health planning activities of the Health Systems Agencies through the year. Some of the negative aspects of the Health Planning Law that we first perceived have been diminished somewhat by time and practicality, but the volume of activity through the HSA's has not lessened. The law proposed some potentially innovative changes in health planning, but most efforts have settled back to routine work, recognizable as being associated with earlier federal efforts.

While organized medicine saw a great many objectionable features in the Health Planning Law, a good bit of it was well-intentioned, if somewhat misdirected. For this reason, few could take exception with many of the goals of the HSA's, as many of the areas in which they are active parallel the objectives of organized medicine.

With these observations as background, the main undertaking of the KMA Committee this year was to evaluate resolutions referred by the House of Delegates from its 1978 session. The Resolutions were F, on the subject of Hospital Occupancy Rates; M, on the subject of Minimum Obstetrical Services; and R, also on the related subject of Maternal and Infant Care.

All three Resolutions related to requirements stipulated in the Health Planning Law, PL 93-641, and all related to the activities of both major HSA's in the state, although each HSA has approached the health planning issues in the Resolutions in different ways.

The Committee began its work on these Resolutions by first sending them to the HSA's, and then convening a meeting with the chief HSA executives to get their reactions to the Resolutions, and to get information on their activities in these areas.

The Committee then considered this information together with the Committee members' own knowledge and observations, to arrive at conclusions and recommendations. This report ad-

resses the Committee's observations and recommendations on each Resolution separately, even though they are related.

The document that generated the Resolutions was the "National Health Planning Guidelines" which appeared in the *FEDERAL REGISTER* in April, 1978. These Guidelines were issued by the Department of Health, Education and Welfare to implement the Health Planning Law. Prior to appearing in final form, the Guidelines had been the subject of much discussion nationwide, and when they first appeared in prosoped form, some 70,000 plus comments were received on them from virtually all areas of the medical field, including formal comments from KMA.

The Guidelines required that hospitals must maintain an average 80% occupancy rate and requirements were set up that hospitals must meet minimum obstetrical and pediatric service standards. Exceptions were allowed for hospitals on both subjects for such things as the average distance required to be traveled by the general public to reach a given hospital, the travel time, fluctuations in admissions due to seasonal variations, and so forth. The Guidelines further formalized the levels of hospital care into primary (Level I), secondary (Level II), and tertiary (Level III). Level I would generally be a local community hospital; Level II would be "regional" hospitals; and Level III facilities would be highly specialized acute service facilities, such as university medical centers.

#### **Resolution**

Resolution F is concerned with the requirement for a minimum average hospital occupancy rate of 80%. It calls on KMA to oppose the establishment of arbitrary occupancy rates applied uniformly in the state, and suggests that in non-urban areas quality and availability of medical care would suffer if these requirements are enforced.

Discussions with both HSA executives indicated that the Health Planning Agencies do not presently have the authority to enforce these regulations directly. The most obvious enforcement authority would be through Certificate of Need, but at the present time, no hospital services or numbers of beds can be "decertified" through the CON process. Expansion of services or addition of beds can be restricted, but this would apply only to new construction or services.

In the West, the HSA is attempting to establish average occupancy rate guidelines by clinical service and size of hospital, rather than strict minimum occupancy percentages. In addition, the Kentucky Health Systems Agency West is apparently supporting the "swing bed" concept where acute beds can be certified as nursing beds if acute occupancy rates drop. KHSBW also is evaluating facilities from the standpoints of the spectrum of services, the intensity or volume of services, and the population of the service area, to include migration.

This same general approach is apparently being used by the Eastern Kentucky HSA, although many of the hospitals in the East are exempt from the Health Planning Guidelines, or are eligible for the exceptions. One of the exceptions in the National Guidelines is that hospitals with fewer than 4,000 admissions per year may be exempted under varying circumstances. Because of geographic problems in the eastern service area, among others, the East is apparently quite concerned about keeping as many hospitals open as possible, even though occupancy rates are below the statewide average.

The Committee is aware that the Department for Human Resources is required and does have a parallel plan for occu-



pancy rates, to which both of the major Health Planning Agencies' plans must conform.

It's the Committee's observation with regard to this Resolution that the likelihood of any abrupt closure of hospitals or decertification of beds is remote. Consideration of average occupancy rates may be appropriate, because many hospitals routinely have rates of less than 60%. While arbitrarily imposed occupancy rates should be vigorously opposed, it is the Committee's opinion that neither the HSA's nor the state government intend to establish a rate that would be applied uniformly to all facilities, and that sufficient exemptions and safeguards exist in the federal regulations, as well as the Certificate of Need process, to prevent any capricious action by the federal or state government.

If the situation should arise where closure or decertification of beds is a possibility, and the facility has an occupancy rate substantially different from the average, there is some logic that justification for the continuance of its services should be given.

With regard to Resolution F, the Committee feels that the Health Planning Agencies are addressing the occupancy rate problem in a reasonable manner, given the constraints of the law, and recommends that KMA be available to individual facilities to assist them should arbitrary closure or decertification of beds become an issue.

Resolutions M and R both address the issue of hospital occupancy rates and material and child care plans, but are essentially directed at the EKHSA and HSAW, respectively.

A part of the concern with this issue that is alluded to in the Resolutions is the fact that the KMA Committee on Maternal and Child Care was indirectly involved with the plans for both HSA's. In 1977, the Committee modified the Sprague Gardiner Report "Toward Improving the Outcome of Pregnancy," which was commissioned by the National Foundation-March of Dimes. In the KMA Committee report, no minimum number of deliveries was established. The KMA Committee offered to voluntarily review hospitals to determine how the services they offer compared with the suggestions made by the report.

#### **Resolution M (EKHSA)**

Resolution M calls on KMA to oppose setting a minimum number of obstetrical deliveries for any hospital in the state to qualify as a Level I, II, or III facility, and suggests that establishing a minimum number of 250 deliveries for Level I hospitals would have a serious effect on the availability of OB services.

Although the Resolution stated that "a minimum of 250 deliveries" was necessary for facilities to be eligible for designation as "Levels I, II and III," the Committee learned that this number actually applies only to Level I hospitals in rural settings.

The EKHSA has established the number of 1500 OB deliveries as desirable for Level I facilities in urban areas.

In developing these guidelines, the EKHSA based its plan on indications that as the size of a delivery unit declines, infant mortality rises. The EKHSA Board recognized that this statistic probably reflects the high-risk nature of the births in the EKHSA service area, but it also recognized the difficulties if all the facilities in its area were to meet the standards, because of cost and manpower shortages.

For these reasons, the EKHSA Board has developed the policy that the 250 delivery number should serve as a guide, and not stand as an issue for closure of OB beds or restriction of OB services.

In arriving at this decision, the KMA Committee report was used by the HSA, as well as fairly constant physician input. While many of the individuals involved opposed establishing minimum numbers, this was felt to be unavoidable in terms of health planning regulations. However, the provision was included that if all necessary personnel and equipment were available, these factors were more important than meeting a simple numerical statistic.

Reliance on a minimum number as a standard should be vigorously opposed. Instead, the major determinant for the delivery of OB services should continue to be the presence of the necessary and appropriately trained personnel and equipment, and it appears that the approach and intent of the EKHSA parallels this view. The Committee recommends, then, that KMA continue to oppose the requirement for a minimum number of OB services to qualify for a given level of care, and further recommends that the EKHSA utilize the KMA Committee on Maternal and Child Health in the overall planning and individual institutional implementation of its maternal and infant care plan. If some arbitrary action is proposed or imminent that would alter or delete needed services, KMA should be available to assist threatened facilities as appropriate.

#### **Resolution R (KHS AW)**

Resolution R addresses the neonatal-perinatal plan of KHS AW; calls on KMA to go on record as resenting the intrusion this plan calls for into medical affairs; stipulates that the plan is unacceptable as presented; and further calls on KMA to combat this type of arbitrary planning. It suggests that if enacted, the plan would work to the economic detriment of rural communities.

In developing its maternal and infant care plan, the KHS AW did not set a minimum number of OB deliveries as necessary for designation as a given "level of care" facility. Instead, the western plan related minimum services to occupancy rates for specialty-certified beds. As an example, if a hospital has ten beds "certified" for obstetrics, it will be required to have an average occupancy rate of 60%. This applies, too, to pediatric beds, medical and surgical beds, and so forth.

The KHS AW apparently utilized the Gardiner report, as well as the KMA modified version of this report entitled, "Improved Maternal and Newborn Care Through Regionalization," and similar plans developed by the American Academy of Pediatrics and other sources.

According to KHS AW, the plan was essentially developed by their Child Health Technical Advisory Group, which consists of nineteen members, twelve of whom are physicians. This Committee met seven times from June, 1977, through May, 1978, to develop the plan. It subsequently underwent the normal process of HSA Board meetings and public hearings, which were held in June, 1978. Following the public hearings, the HSA Board gave final approval to the plan, but deleted criteria and standards relating to a minimum number of deliveries for Level I OB and perinatal services. The result was, as previously stated, that no minimum number of deliveries was established for qualification as a Level I facility.

With regard to Resolution R, the Committee would agree that many facets of health planning, including aspects of the maternal and child health plan of KHS AW, do constitute a degree of intrusion into the affairs of physicians. This would be particularly true if all of the health plans proposed were implemented in the most rigid terms. This would undoubtedly result in an upheaval of the medical care system as it now

exists. However, with regard to this particular plan, it's the Committee's impression that ameliorating factors have had the effect of mellowing some of the problems that prompted the Resolution. Most apparent are the facts that KHS AW did rely somewhat on similar work by the American Academy of Pediatrics and input from medical practitioners active in the affected specialties. Further, while occupancy rates by service, by certified beds, may be objectionable, the lack of enforcement authority provides little recourse for direct formal objection. It's the Committee's recommendation that KHS AW be strongly urged to rely on routine input to their maternal and child care activities by the KMA Committee on Maternal and Child Health, and that KMA make itself available to assist individual institutions whose OB or pediatric services might be threatened by arbitrary implementation of this plan when appropriate.

When considered independently, the issues raised in each of the Resolutions—F, M and R—are ominous and worthy of considerable concern. However, after the HSA Committee's meeting with the health planning agency executives, a number of informal meetings, and becoming aware of the other information contained in the foregoing report, the HSA Committee feels that any overt action in opposition to these objectives is inappropriate. It would be more appropriate for increased physician input at all levels of health planning, in addition to ongoing formal scrutiny by KMA to insure that forthcoming plans are reasonable, would not be disruptive to the quality and availability of medical care, and agreeable to organized medicine and medical practitioners. The Committee was impressed by the efforts of some individual physicians who had contributed a great deal of time and effort to the work of both HSA's to protect the interests of medicine and allow for rational medical practice.

It is become apparent that organized medicine can influence the course of health planning activities, but can do so most effectively through individual physician effort.

Harold L. Bushey, M.D., Chairman

#### RECOMMENDATIONS

##### Resolution

1. KMA reaffirms its opposition to imposition of arbitrarily established hospital occupancy rates applied uniformly to all areas.

2. KMA should be available to assist individual facilities, as appropriate, should arbitrary closure or decertification of beds become an issue.

##### Resolution

1. KMA reaffirms its opposition to arbitrarily established minimum numbers of services for hospitals to be eligible for designation as different level of care qualified facilities.

2. KMA should urge the Eastern Kentucky Health Systems Agency to utilize the KMA Committee on Maternal and Child Care in the planning and implementation of the EKHS A maternal and infant care plan.

3. If some arbitrary action is proposed or imminent that would alter or delete needed services, KMA should be available to assist threatened institutions as appropriate.

##### Resolution

1. KMA should urge the Kentucky Health Systems Agency West to rely on routine input to their maternal and child care

activities by the KMA Committee on Maternal and Child Health.

2. KMA should be available to assist hospitals whose obstetric or pediatric services might be threatened by arbitrary implementation of the KHS AW neonatal-perinatal plan where appropriate.

#### Addendum

Routine monitoring has also been directed at the activities of the HSA for northern Kentucky, the Central Ohio River Valley Authority (CORVA). This HSA, whose authority crosses the Ohio-Kentucky boundary, includes the Kentucky counties of Campbell, Kenton and Boone. Formal comments have been prepared on various CORVA documents, in addition to other communications.

#### Recommendations, Reference Committee No. 5

The Committee next considered the Report of the Committee on HSAs. The Committee heard testimony from Doctor Bushey and other persons, including Mr. Robert Slaton, Commissioner for the Bureau for Health Services for the State of Kentucky.

Doctor Bushey and his Committee are to be commended for the extensive work and research which they have done.

The Committee feels that KMA should encourage physicians to participate at all levels of the health planning process and make every effort to insure that accurate statistical data is utilized in health planning decisions.

The Committee recommends that this report be adopted.

A motion was made, seconded, and carried to accept the Reference Committee's recommendations.

## Resolution G

### Pulaski County Medical Association

WHEREAS, the Kentucky Budget (1978-80) appropriated \$1,250,000 for FY 78-79, and \$1,266,500 for FY 79-80 for the program of screening indigent children (but not Medicaid eligibles) during the first six years of life at County Health Departments, and

WHEREAS, this shall consist of five visits the first year at \$25 per visit, and yearly thereafter at the same fee, and

WHEREAS, these so-called screening visits are, according to the Commissioner of the Bureau for Health Services, Robert Slaton, to be conducted by paraprofessionals (whose training is not by physicians, and very equivocal at best) and with limited or, in most cases, no physician input, and

WHEREAS, most physicians feel the first year of life to be the most important for a child to have adequate medical examinations, quality medical care, and to establish himself a medical home where twenty-four hour care is available, and

WHEREAS, the KMA Committee on Maternal and Child Health has twice recommended rejection of the plan as it is currently in operation in many counties of the Commonwealth, now therefore be it

RESOLVED, that the House of Delegates oppose this program and act through whatever means from the Governor to the several non-M.D. bureaucrats in the Department for Human Resources to stop this program, and be it further

RESOLVED, that KMA use all of its resources to correct the deficiencies in this plan, provide physician participation in it, and provide all of the children of the Commonwealth during these formative years an adequate medical home.



#### Recommendations, Reference Committee No. 5

Reference Committee No. 5 next considered Resolution G on County Board of Health Non-Medicaid Screening Program.

Again, after hearing testimony from numerous sources, including the Department for Human Resources and physicians present, Reference Committee No. 5 recommends that this Resolution be adopted with the following amendments.

Paragraph six (6) should be reworded so as to read: "RESOLVED, that the House of Delegates oppose this County Board of Health Non-Medicaid Screening Program and act through whatever means to suspend this program, and be it further . . ."

In the final paragraph, the words "all of" should be deleted from the first sentence so as to read: "RESOLVED, that KMA use its resources to correct the deficiencies in this plan, provide physician participation in it, and provide all of the children of the Commonwealth during these formative years an adequate medical home."

The House members discussed the Reference Committee's recommendations at length, during which time several substitute amendments were offered.

In final action, it was moved, seconded, and carried to delete all original "Resolves" in Resolution G, and adopt the following:

**RESOLVED**, that the House of Delegates oppose the County Board of Health Non-Medicaid Screening Program and the Geriatric Screening Program and act through whatever means necessary to suspend these programs until such time as there is a demonstrated need for such programs, and be it further

**RESOLVED**, that if there is, in fact, a demonstrated need for such programs for the care of indigent pediatric and/or geriatric patients, that the KMA express a desire to have direct input into any proposed state program.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 5 as a whole as amended. (The motion was seconded and carried.)

I would sincerely like to thank the other members of the Committee: James C. Embry, M.D., Paducah; Allen E. Grimes, M.D., Lexington; David E. Townes, M.D., Louisville; and Terry L. Wright, M.D., Elkhorn City; for the long hours spent in listening and digesting testimonies. A special thanks to Ms. Sharon Heckel for her tremendous assistance.

#### REFERENCE COMMITTEE NO. 5

Robert E. Smith, M.D. Covington, Chairman  
James C. Embry, M.D., Paducah  
Allen E. Grimes, M.D., Lexington  
David E. Townes, M.D., Louisville  
Terry L. Wright, M.D., Elkhorn City

#### REFERENCE COMMITTEE NO. 6

*Don E. Cloys, M.D., Richmond*  
Chairman

Reference Committee No. 6 considered the following reports and Resolutions:

10. Report of the Judicial Council
11. Report of the Rural Kentucky Medical Scholarship Fund
22. Report of the Physician-Attorney Liaison Committee

23. Report of the KMA-Kentucky Nurses Association Joint Practice Committee

35. Report of the Membership and Placement Services Committee

39. Report of the Committee to Study the Constitution and Bylaws

40. Report of the McDowell House Board of Managers

8. Report of the Delegates to AMA; Report UU

8. Report of the Delegates to AMA; Report of the Ad Hoc Committee on the Principles of Medical Ethics

Resolution I—Brain Cessation and Death (Jefferson County Medical Society)

Resolution J—Ethics Involved in the Disclosure of Laboratory Charges (Jefferson County Medical Society)

Resolution O—Rural Kentucky Medical Scholarship Fund (Fayette County Medical Society)

Resolution Q—Establishing the Muhlenburg County Medical Society (Pennyrile Medical Society)

Reference Committee No. 6 reviewed the following reports and Resolution and recommends they be adopted or filed as indicated, by the consent of the House, without discussion:

#### Report of the Judicial Council

The Judicial Council has met six times this year and has considered or is considering over 54 separate issues.

The majority of the items addressed by the Council may well have been resolved on a first-hand basis between the physician involved and the patient. The Council continues to note that most patient complaints result from simple misunderstandings that could be avoided by better communication between the physician and the patient or the physician's office staff.

Most patient complaints are received by means of phone calls to the Headquarters office. The KMA office continues to receive an average of ten phone calls a week, some of which are followed by formal complaints. These are referred to the district trustees or local county societies for evaluation and the Council then attempts to act on this information.

Aside from routine patient complaints, some new major situations were brought to the Council's attention. These will be discussed in summary for the information of the membership.

The 1978 Kentucky General Assembly enacted legislation that requires each hospital in the State that provides emergency room service to arrange for a physician to be on call 24-hours a day for the purpose of examination of victims of sexual offenses. The law has been interpreted to mean that the hospital bears the responsibility to make arrangements for such a physician's presence, but the membership should be aware of this requirement from a legal, as well as medical care, standpoint. No information or precedent has yet developed that would indicate any specific training is required for the physician.

The Council was ultimately required to censure two physicians this year. In one situation a physician implied incorrect information to a family, one of those members had received services from another physician. The family in turn had instituted a number of actions which were not appropriate, causing the physician that provided the service undue and unnecessary harassment. In the second situation a physician had failed to respond to requests for information from the county

grievance mechanism and the Council, repeatedly, and censure was invoked.

An opinion by the Council on physician advertising has been held in abeyance for some time pending legal actions at the national level against the AMA and the establishment of other legal requirements here in the state. The Federal Trade Commission had challenged the right of the AMA through its Judicial Council Opinions to proscribe physician advertising on the basis of alleged restraint of trade. Rulings have since been issued to the effect that unless it is fraudulent or contains misleading statements, the act of advertising is considered legal. The Council, in general, still feels that advertising is not in the best interest of the physician or the profession. However, any final opinion will probably be tempored by the legal status. The Council would ask that the membership give attention to traditional aspects of decorum with regard to advertising.

With regard to itemized billing and insurance forms, the Council has previously rendered an opinion that physicians should provide their patients with itemized statements as a matter of policy on request. While this is not a matter of ethics, a complete itemized bill should be given the patient so that the contractual obligation of the carrier can be met. In relation to this, the Council has ruled that it is unethical for a physician to refuse to complete a patient's insurance forms without cause.

In one situation a physician questioned the propriety of accepting prescription blanks with the name of a pharmacy pre-printed. The Council ruled that this is unethical and that the physician should dispose of the blanks and notify the pharmacy of the situation.

Several complaints were received this year from patients who were not seen by physicians because the patients were Medicaid recipients. Disregarding emergency situations, the Council ruled that a physician has the right not to see a patient just as the patient has the right of free choice of physician.

The Council continues to enjoy a close working relationship with the Board of Medical Licensure and has developed a mutual cooperative effort that has been beneficial, we feel, to the efforts of both groups and the profession.

The working association formed by the Council, the Medical Licensure Board, the Peer Review mechanism and the Committee on Physicians' Health has procedures necessary to deal with most any situation involving a physician that may arise, and the Council is gratified to be able to act in this fashion.

We would urge that every member make every effort to establish better communications with his patients and to assist and cooperate with KMA Trustees when discharging their duties on behalf of the Council.

My thanks and deep appreciation are given to the members of the Council and staff who have spent countless long hours representing the Association and working in their behalf.

E. C. Seeley, M.D., Chairman

## **Report of the Rural Kentucky Medical Scholarship Fund**

The Board of Trustees, of the Rural Kentucky Medical Scholarship Fund at its 33rd annual meeting, approved 15 new and 40 renewal loans to medical students for a total of \$220,000. This brings the total number of students who have received loans in the 33-year history of the Fund to 466.

This Scholarship Fund, as others, is experiencing a financial crunch that is resulting in a shortage of funds. It has been the

policy of the Fund to extend a loan to all needy and eligible medical students who apply for assistance. We are proud of our record and hope to continue our loan policy. Currently we have 66 recipients in medical schools, 13 of which graduated this year. An additional 21 are now in specialty training and 9 recipients have entered practice bringing the total number of practicing recipients to 223 located in 82 counties.

In order for the Fund to continue its policy of loaning to all qualified students, it must obtain more revenues. The Fund has not only experienced a financial drain, but an increased number of requests for funding. This coupled with an increased number of students locating in critical counties, thus being forgiven their indebtedness to the Fund, has slowly diminished the Fund's reserves. Several approaches are currently being discussed by the Board on how to obtain additional funding from the government and private sector. If this should fail, then certain steps will have to be taken to reduce the number of loans that can be given each year. We hope this can be avoided.

Several steps the Board has taken are to increase the interest rate on all notes to 50% of the prime interest rate as of May 1 of the year the money is loaned and to discontinue the Establish Practice Loan Program. The Rural Kentucky Medical Scholarship Fund may also be required to restructure certain aspects of its loaning policy to insure that adequate funds would be available to future students.

The Fund continues to maintain its status as one of the most successful of its kind in the nation, and we hope that a reduction of funds will not necessitate our having to curtail our services. Additional funding has been obtained from the Governor for this next school year, and the Board would like to extend to him its sincere thanks for his continued support of the Fund and hopes that he will continue his active support to guarantee that citizens of the Commonwealth can rely on the Scholarship Fund to assist in alleviating physician shortage.

Upon advice of Legal Counsel, the Rural Kentucky Medical Scholarship Fund will become incorporated in the near future. With the Fund becoming as large as it is and the complexity of new rules and regulations, it was felt appropriate to incorporate. The incorporation will not only safeguard the interests of the Board but also the recipients.

The following individuals have been elected to the Board: Mrs. Frances Baccus, Eddyville; Stanley Hammons, M.D., Frankfort; and Carl Cooper, Jr., M.D., Bedford. I would like to welcome them to the Board and look forward to their assistance. Also, I would like to commend the Board for their support and guidance.

G. L. Simpson, M.D., Chairman

## **Report of the Physician-Attorney Liaison Committee**

The Physician-Attorney Liaison Committee, formed by the Kentucky Medical Association and the Kentucky Bar Association, continues to provide reference and services promoting understanding between the medical and legal professions. The mechanisms developed jointly by the two professions over the years promotes prompt and expeditious handling of complaints and misunderstandings among the parties involved.

Participation by the membership of the Committee, composed of three physicians and three attorneys, has been excellent. The Interprofessional Code, formulated and adopted by both the KMA and KBA, has provided the excellent direction for the Committee.



The Committee did not meet formally this Associational year, since only two complaints were referred for formal opinion. Both were handled by telephone and correspondence.

We again wish to refer members to the Interprofessional Code, available through the KMA office, if there is any question prior to formal complaints being made.

Thomas M. Marshall, M.D., Chairman

## **Report of the KMA-KNA Joint Practice Committee**

The KMA-KNA Joint Practice Committee met during this Associational year once following the attendance of the Co-chairpersons at the Third National Conference on Joint Practice last November in Houston.

The conference provided to the participants an interesting variety of subjects relating to joint practice. It also gave us an opportunity to interact with other representatives from state joint practice committees and the National proponents of joint practice.

Due to the resignation of the KNA Executive Director and loss of my Co-chairperson to relocation in another state, the Committee has not met recently. The Committee assumes that its activities will resume some time during the next Associational year.

One of the first activities we plan to undertake at that time is an educational program on joint practice to inform the membership of its intents and benefits. The Committee feels that much of the apprehension physicians have about joint practice is a result of inadequate information about it.

On behalf of the physician Committee members, I wish to convey our sincere appreciation to Sister Francis Scholl for her dedicated service to the Committee, and we wish her much success in her new endeavors. Also, I would like to take this opportunity to thank the Committee members for their support.

Kenneth P. Crawford, M.D., Co-chairperson

## **Report of the Membership and Placement Services Committee**

The Membership and Placement Services Committee, which was reactivated several years ago, continues to seek new approaches in stimulating membership in the Association and attracting more physicians to practice in the State of Kentucky. By the end of this Associational year, the Committee will have met three times to develop the guidelines to carry out these goals.

### **MEMBERSHIP**

The Membership Committee is happy to report that the Association's membership continues to climb, and last year we had one of our best recruitment years in quite a while. The recent purchase of the computer by the Association will assist in expediting our current recruitment letter program and will also enable us to keep closer tabs on which programs are succeeding in encouraging doctors to join the KMA. As soon as the computer system is operational, more direct mailings to the non-members group will be undertaken, and eventually a statewide program, coordinated by the Committee, using one-on-one personal contact will be undertaken.

A resident physician survey was undertaken by the Committee to determine its desires in forming a Resident Physician Section of the KMA. The concept behind the RPS was formu-

lated by the AMA and has been recommended to us as a means of increasing membership and input from the resident physician section. It was felt that the results of the survey were inconclusive, and the Committee decided that an additional survey should be undertaken to determine if residents were interested in forming their own section. One positive aspect of the survey was that it resulted in approximately 8% of the resident population applying for membership. The Committee believes, as others do, that the future of medicine lies in our young physicians, and every effort to actively involve medical students and in-training physicians in organized medicine should be undertaken.

Last year the Committee presented a plan to the House of Delegates requesting certain changes be undertaken to encourage more student membership and involvement within the KMA. At that time the House felt more detailed planning on this particular request was required and directed the Committee to develop new guidelines and submit them to the Board for consideration. The Committee subsequently recommended that all medical student dues be reduced to zero as a means of encouraging student membership. All students would be encouraged each fall to register with the Association, and those doing so would routinely receive all Associational correspondence except *The Journal*, which could be purchased at a \$5.00 subscription rate. The regular distribution of *The Journal* to each of the medical schools' libraries would be continued. Additional planning involving the local medical societies and the medical students is being undertaken with the possibility of an activities day being held. This would entail a one day or evening program, where students could interact with local physicians and become familiar with the benefits organized medicine has to offer.

The Committee is concerned with the lack of AMA membership by Kentucky physicians. The AMA membership in Kentucky has not kept pace percentage wise with KMA membership over the past couple of years. The Jefferson County Medical Society has undertaken a program to increase membership in the AMA, and we have noted that this program has been successful. Upon further analysis of the JCMS program, the Committee hopes to initiate a statewide program that will help increase membership in the AMA. The Committee strongly encourages the members to join the AMA if they have not already done so. The current political and governmental conditions are reasons alone to join AMA in order to insure that our voice is heard.

### **Placement Services**

The original reason for reactivating the Committee was to design ways to stimulate membership in the Association. However, now it is apparent, due to the last legislative session, that the Association needs to take an active role in helping to locate physicians in Kentucky. The RKMSF, which KMA sponsors, assisted partially in alleviating this problem; however, an expanded placement service at the KMA Headquarters Office was determined to be needed. The addition of the computer, as mentioned earlier in this report, will assist this portion of our Committee's charge in enabling us to provide updated listings of communities looking and physicians seeking. A major revision of all applications and data to be collected and stored is currently underway. In the near future we hope to provide a physician with detailed information on all communities in the State providing practice opportunities. The information, hopefully, would include photographs, literature on the community and the service it has to offer. This long-

range planning is being augmented by the first annual Physician Recruitment Fair, which will be held on October 20 of this year.

The Physician Recruitment Fair was an idea presented to the House last year as a means of assisting communities and physicians in meeting together to discuss practice opportunities. The Committee has the program scheduled to be held at the Ramada Inn-Bluegrass Convention Center and will be inviting senior medical students, residents and interested physicians from Kentucky and the surrounding states. The one-day program will feature two sessions. The morning session will offer an orientation and instructional workshop for communities in the art of recruiting a physician. Lectures will be given by noted experts in the field of professional recruitment and community action program.

The afternoon session features a recruitment fair where communities will exhibit the attractions of their areas to prospective physicians. The atmosphere will be informal to enhance and stimulate open conversations. As of the date this report was written, 35 communities had voiced an interest in participating in this program. The medical schools have also pledged their support to the program, and numerous mailings were undertaken to invite any interested party to attend. The Committee has invited the Kentucky Hospital Association and several other interested groups to participate in this program as co-sponsors.

I wish to express my thanks to the Committee for its support and attendance and staff for its assistance.

John M. Baird, M.D., Chairman

## **Report of the Committee to Study the Constitution and Bylaws**

The Constitution and Bylaws Committee met by letter poll since it had only one item to consider.

The KMA Committee on Membership Recruitment and Retention developed a number of recommendations which it felt would help in its efforts of recruiting new KMA members while retaining current ones.

The Committee felt that if medical students became active in the affairs of organized medicine at the student level, they would be most likely to retain their membership after entering practice. The Committee noted that today's medical education costs often make it difficult, if not prohibitive, for medical students to be a member of KMA. For this reason, the Committee has suggested that dues for students be waived.

The Board of Trustees was in agreement with this philosophy and has asked that the Constitution and Bylaws Committee present an amendment to the House of Delegates which would delete the current dues of \$10 per year for student membership. Thus, it is recommended that the current Chapter IX, Section 1(6) which current reads ". . . student members, \$10 . . ." be changed to read as follows: ". . . student members, no dues; . . ."

Robert L. McClendon, M.D., Chairman

### **RECOMMENDATIONS**

1. The Committee recommends that dues for students be waived and that the current Chapter IX, Section 1(6) of the Bylaws which currently reads, ". . . student members, \$10; . . ." be changed to read as follows: ". . . student members, no dues . . ."

## **Report of the McDowell House Board of Managers**

The McDowell House Board of Managers has met on four occasions during the past Associational year at quarterly intervals at the McDowell House in Danville, Kentucky. The members of the Board remain enthusiastic, and each one contributes to the present supervision and foresight for the future in the preservation of the House.

During this year no interior renovation has been carried out because the Kentucky Heritage Commission was unable to allot a grant at this particular time, although the Board has been urged to resubmit its application for the coming year. The exterior of the House is in good condition having had a renovation last year. The interior is showing some deterioration of the plaster, which will require attention, although it is not of an emergency nature. The electrical wiring will require replacement soon.

During the year, Mrs. West T. Hill retired as Assistant Curator after many years of devoted service to the McDowell House, during which time she increased its educational value tremendously. Appointed in her place was Mrs. Susan Nimmocks, who began on November 1, 1978, and since then has been in charge of the House with daily supervision. Already Mrs. Nimmocks has instituted a program, "Friends of McDowell House," for which the Board has approved letters to individuals who may be interested in sustaining the future of the McDowell House. This already appears to be moving quite well as a number of the 850 individuals who received this letter have responded.

A special Committee on Fund Raising of the Board, chaired by Mrs. George Schafer who represents the medical Auxiliary, is exploring other methods of obtaining funds and endowment in the future. This Committee is working closely with Mrs. Nimmocks.

The Board is especially pleased that Doctor Robert S. Sparkman of Dallas, Texas, will speak before the Kentucky Medical Association on "The Woman in the Case." This refers to the bravery and the details of the operation which Mrs. Jane Todd Crawford had performed by Doctor Ephraim McDowell on December 25, 1809. This is a stirring story, particularly embellished and made attractive by Doctor Sparkman.

Following the quarterly meeting of June 20, 1979, the Adam Goldsmith House, across the street from the McDowell House, was formally dedicated. The Board adjourned to attend this dedication and to hear an address relating to Doctor Goldsmith by Doctor Eugene Connors. This is of particular interest because Doctor Goldsmith studied with and assisted Doctor McDowell. He continued to perform the McDowell operation in later years.

The status of the House is satisfactory, but needs constant attention. As stated previously, the wiring system will need replacing in the near future, and the interior plastering will need some renovation. The House continues to represent an important monument to medicine and to complement the efforts of the Kentucky Medical Association.

Laman A. Gray, Sr., M.D., Chairman

### **Addendum**

Since the annual report of the Board of Managers of the McDowell House was submitted, the program of defective wiring and the concerns of the Kentucky Utilities regarding the House have been corrected. A new power box and breakers



were installed at a cost of \$357.42. Since then the House has been inspected by the proper authorities, and the electrical wiring system was found satisfactory.

## Resolution Q

### Pennyrile Medical Society

WHEREAS, the Pennyrile Medical Society has received a petition for the establishment of a Muhlenberg County Medical Society, and

WHEREAS, the membership of the Muhlenberg County Medical Society will be composed of members of the Pennyrile Medical Society, and

WHEREAS, we are mindful of many years of successful association in the Pennyrile Medical Society, and

WHEREAS, the Pennyrile Medical Society recognizes the development of a changing environment for the effective discharge of collegial responsibilities through professional association, and

WHEREAS, this change represents a purely organizational restructuring and is in no sense a severance of personal, professional or social relationship, be it therefore

RESOLVED, that the Pennyrile Medical Society petitions the Kentucky Medical Association to establish a Muhlenberg County Medical Society; and that the officers of this Society make an equitable distribution of the assets of the societies, as soon as the Muhlenberg County Medical Society may be chartered.

#### Items for Consent

10. Report of the Judicial Council—filed
11. Report of the Rural Kentucky Medical Scholarship Fund—filed
22. Report of the Physician-Attorney Liaison Committee—filed
23. Report of the KMA-Kentucky Nurses Association Joint Practice Committee—filed
35. Report of the Membership and Placement Services Committee—filed
39. Report of the Committee to Study the Constitution and Bylaws—adopted
40. Report of the McDowell House Board of Managers—filed

Resolution Q—Establishing the Muhlenberg County Medical Society (Pennyrile Medical Society)—adopted

## Report of the Delegates to AMA

### Report UU (A-79) AMA of the Board of Trustees—Only

#### The Position of the AMA on Chiropractic and Relations between Physicians and Chiropractors

This report states the position of the American Medical Association on (1) chiropractic doctrine and (2) relations between physicians and chiropractors.

*Webster's New Collegiate Dictionary* (1977) defines chiropractic as a "system of healing which holds that disease results from a lack of normal nerve function and which employs manipulation and specific adjustment of body structures (as the spinal column)." In Dorland's illustrated *Medical Dictionary*, 25th edition (1974) chiropractic is defined as a "system of therapeutics based upon the claim that disease is caused by abnormal function of the nerve system. It attempts to restore normal function of the nerve system by manipulation

and treatment of the structures of the human body, especially those of the spinal column."

The American Medical Association knows of no scientific evidence to support spinal manipulation and adjustment as appropriate treatment for human ailments such as essential hypertension, heart disease, stroke, cancer, diabetes and infections. Accordingly, the Association will continue to warn the public of the hazards to health in entrusting the diagnosis and treatment of such conditions to practitioners who rely upon the theory that all disease is caused by misalignment of spinal vertebrae and can be cured by manual manipulation and adjustment of the spine.

Chiropractors disagree on the extent to which they accept or reject traditional chiropractic doctrine. Describing chiropractic as an "unscientific cult" does not, however, necessarily mean that everything a chiropractor may do when acting within the scope of his or her license granted by the state without therapeutic value, nor does it mean that all chiropractors should be equated with cultists. It is better to call attention to the limitations of chiropractic in the treatment of particular ailments than to label chiropractic an "unscientific cult."

The American Medical Association reaffirms that a physician should at all times practice a method of healing founded on a scientific basis. A physician may refer a patient for diagnostic or therapeutic services to another physician, a licensed limited practitioner, or any other provider of health care services permitted by law to furnish such services, whenever the physician believes that this will benefit the patient. As in the case of referrals to physician specialists, referrals to limited practitioners should be based on their individual competence and ability to perform the services needed by the patient.

Similarly, the American Medical Association supports the right of every physician to choose those persons whom he or she will accept as patients and also to exercise his or her choice by the terms of contractual arrangements with other physicians, medical groups, hospitals or other institutions.

#### Recommendation

The Board of Trustees recommends the adoption of this report.

#### Recommendations, Reference Committee No. 6

Reference Committee No. 6 reviewed the report of the AMA Board of Trustees on the subject "The Position of the AMA on Chiropractic and Relations between Physicians and Chiropractors." The Committee recommends this report be filed.

A motion was made, seconded, and carried that the Reference Committee's recommendation be accepted.

## Report of the Delegates to AMA

### Report of the AMA Ad Hoc Committee on The Principles of Medical Ethics (A-79)—Only

#### Introduction

During the 1977 Interim Meeting of the House of Delegates, the Judicial Council introduced Report A, "American Medical Association Principles of Medical Ethics," which offered revised Principles for consideration. The stated intent of the revision was to clarify and update the language, to reach a proper stance between professional principles and contemporary society and to eliminate any reference to gender. First adopted in 1847, Principles were revised during the 40's and

most lately in 1957. The latest publication of the "Opinions and Reports" of the Judicial Council was issued in 1977, the first such revision since 1966.

Following debate in the Reference Committee on Amendments to Constitution and Bylaws and on the floor of the House, the House deferred action on the Revised Principles and approved the Judicial Report A (A-78) recommending "that a special committee of the House be appointed to consider the revision of the Principles further. To assure that this special committee is broad-based, the Council recommends that it consist of appropriate representatives from the House of Delegates and the Board of Trustees, and that it meet with the Judicial Council to study this matter further."

The Speakers of the House appointed the following to serve as an Ad Hoc Committee:

James S. Todd, M.D., Chairman, H. Thomas Ballantine, Jr., M.D., Amos P. Bratrude, M.D., John J. Coury, Jr., M.D., Jean F. Crum, M.D., Henrietta Herbolzheimer, M.D., Joseph T. Painter, M.D., Carroll L. Witten, M.D.

This Ad Hoc Committee presented an initial report to the House of Delegates at the 1978 Interim Meeting. In that report the Committee detailed its activities and indicated that while the emphasis of its charge was on the review of the current Principles of Medical Ethics and the revision proposed by the Judicial Council (I-77), the Committee believed that such a review warranted a more comprehensive study of the evolution of ethics in society, the role of ethics for a profession and the consequences of ethical statements vis a vis society and law.

In its first report, the Committee did, however, submit the following conclusions to the House:

1. A code of ethics is desirable and necessary to provide guidance during the conduct of a physician's practice.
2. The medical profession is no longer perceived as the sole guardian of the public health, and consequently the traditional paternalism of the profession is in conflict with society.
3. Physicians need to be responsive to their patients, to their profession, to society, and to themselves as individuals without emphasizing one at the expense of the others.
4. The body which generates a code of ethics should be distinct and separate from the body which interprets and enforces that code.
5. A code of ethics should not make reference to gender.
6. Neither the present Principles of Medical Ethics nor the revised version could be recommended as appropriately articulating the proper ethical stance for the profession.
7. The Committee should continue its study, and make a final report to the House during the 1979 Annual Meeting.

With the acceptance of this report by the House of Delegates, the Ad Hoc Committee believed that the House expected the development of a new code of medical ethics based on firm principles and consonant with the demands of contemporary society. Although fully cognizant that the current Principles were considered adequate by some members of the Association, the Committee did not feel that its responsibility would be discharged properly without providing the House with a revision which would not only respond to contemporary changes, but which also would more fully express a physician's dedication to high ideals.

Consequently, state, metropolitan and specialty organizations, as well as sponsors of resolutions, were once again asked to submit comments and proposals regarding what a code of ethics for the profession should contain. Issues pertaining to interpre-

tation were specifically excluded since the Committee firmly established that those who generate codes should not interpret them.

Twenty responses were received; five from individuals, five from specialty societies, and ten from state or county medical societies. Additionally, oral testimony was received from the Judicial Council, the American Psychiatric Association, the Resident Physician Section, the American College of Radiology, the American College of Surgeons, the American Academy of Orthopaedic Surgeons, The Medical Association of Georgia, and W. Dan Jordan, M.D., representing Frank A. Rogers, M.D.

The Ad Hoc Committee held four meetings since the 1978 Interim Meeting. The first, on January 5-6, was a meeting with the Judicial Council, and a careful review of the written material submitted to the Committee since its formation. The second meeting, March 24-25, was devoted to receiving oral testimony, and to considering what should be the form for the report and principles. A third meeting was held April 28-29, during which the report and principles were drafted. A final meeting was held on June 24 to finalize this report. The goal of these deliberations was to develop a new version of the Principles of Medical Ethics which, while addressing classical areas of ethical responsibility, would also be contemporary enough to preserve the position of medicine among the professions.

#### Ethical Philosophy

As a consequence of its study, the Ad Hoc Committee has concluded that moral principles are standards of conduct applicable to all segments of society, while ethical principles are standards of conduct in accord with the moral standards of a society, but particularly applicable to a special segment of that society. Medical ethics are, therefore, a specific application of the universal norms of moral behavior. It should not be assumed that there is a special type of ethics appropriate solely to our own profession. Ethics for a profession depend upon the role of that profession, and, as in medicine, when the role expands, ambiguity and uncertainty appear. Traditionally, ethics evolve from human experience and define what one ought to do. As human experience expands and changes, so does the need for study of ethical behavior.

A code of ethics sets the limits beyond which behavior will be unacceptable, and in general addresses areas not defined by law. In many instances ethics will establish standards of greater virtue than law, and while ethical behavior requires conformance to law, it also mandates lawfully conducted action to change those provisions felt to be morally inferior or detrimental. If only an appeal to individual conscience were allowed, chaos would result. The professional must work within the constraints and expectations set by those who commission his work.

The shifting sands of society preclude long-standing adherence to ethical principles without reevaluation and restatement into forms appropriate to the times. No professional organization has adhered immutably to unchanging codes, and the American Medical Association is no exception. Ethical changes cannot be settled solely by rational discussions, but rather as a result of the realistic evaluation of human experience.

Ethics were never intended to be laws, but rather standards by which one may be measured. Ethics are broad and lofty ideals which permit individual discretion counterbalanced by individual accountability. Rules, on the other hand, restrict individual discretion, and by close adherence, reduce accountability. In a profession where the individual is dominant, as



in medicine, latitude for individual discretion and accountability must be provided. A hallmark of a professional is the willingness of the individual to assume personal responsibility for professional activities.

Any restatement of ethical principles should not be looked upon as a change in policy or a lowering of standards, but rather as a refinement of those principles to a level where they have greater contemporary meaning. Ethical behavior is behavior that is appropriate and fitting in particular circumstances guided by more universal norms. The specific mandate does not change, but its application does. Physicians will be in an increasingly awkward position if they hold to the traditional commitment that their only concern is to the patient. Society is demanding more and the need for change should not be ignored. Ethics as statements of virtuous conduct have been evolutionary in development, and that evolution inevitably will continue as new problems and attitudes develop. Professionals must distinguish between a profession and a function. The function truly may be eternal, but a profession is temporal and must respond to change if it is to survive. The profession does not exist for itself, it exists for a purpose, and increasingly that purpose will be defined by society. Failing this accommodation, the profession will wither as external pressures mount.

#### **Application to the American Medical Association**

The American people look to the medical profession and the American Medical Association to establish standards for professional action in response to specific problems. Physicians look to the American Medical Association for guidance, information, coordination and representation. To fulfill these expectations the Association must have a strong set of Ethical Principles as a statement of what the profession and its individual members stand for, and emphasizing how those members are dedicated to public service without referring to specific means or mechanisms. In any given situation, instead of utilizing a single principle for guidance, the aggregate influence of all the Principles should apply in determining appropriate action.

Paternalism by the profession is no longer appropriate, since no longer is the profession perceived by the public as the sole guardian of the public's health. Physicians must not fall prey to believing that all health benefits come from areas of their own experience and scientific validity alone. Conversely, however, where science has shown a specific practice to be detrimental, physicians must be vigorous in denouncing it.

A difficulty of any profession is that, while individuals differ as much as humans can, professionals are expected to act in a standard manner. The Ad Hoc Committee has tried to find the appropriate ethical position of the profession recognizing the shifting expectations of society and the influence they have on the profession.

#### **Issues Requiring Further Consideration**

During its deliberations, the Ad Hoc Committee perceived issues beyond its purview deserving further study and consideration by the House of Delegates.

1. Should this proposed version of the Principles of Medical Ethics be adopted, the Opinions and Reports of the Judicial Council may not then be totally appropriate. The Ad Hoc Committee is of the opinion that, if these Principles are adopted, it is essential that the Opinions and Reports should be reviewed and perhaps rewritten after further debate of the issues with presentations before the Judicial Council by interested parties. To dispel any remaining assumptions that the House of Delegates can change an opinion of the Judicial Council, the Ad

Hoc Committee would call attention to the summary in the report of the Reference Committee on Amendments to Constitution and Bylaws (1-78), page 2:

"The 1977 edition of Judicial Council Opinions and Reports is presently in effect.

"Under the Bylaws, Opinions and Reports of the Judicial Council interpreting the AMA Principles of Medical Ethics need not be submitted to the House of Delegates for approval. The Bylaws confer upon the Judicial Council final authority to interpret the American Medical Association Principles of Medical Ethics.

"The Judicial Council can modify or amend its opinions and reports at any time . . . the following statement appears on Page 1 of the 1977 edition of Judicial Council Opinions and Reports:

"Opinions and Reports of the Judicial Council remains a basic compilation of interpretations, opinions and statements of the American Medical Association Judicial Council which may be expanded, contracted, or modified from time to time to meet changing conditions of medical practice."

As was done in the Substitute Resolution for Resolutions 16, 50 and 106 (I-78), the House may, however, request the Judicial Council to reconsider their opinions.

2. With the emergence of bioethical issues such as the technology of genetic control, recombinant DNA, and controlled fertility along with the changes in society's moral position, the medical profession can expect to face many ethical problems in the future. The Ad Hoc Committee believes a mechanism should be developed for monitoring, periodically reviewing and anticipating the ethical stances to be taken by the profession.

3. In order to establish clearly the House of Delegates as the body which generates the Principles of Medical Ethics, the Bylaws need to be amended by deleting "the establishment of principles and" from Chapter XIII, Section 4A, 2d. (6.4011 decimalized version.)

4. Extensive testimony was heard regarding a perceived change in American Medical Association policy regarding chiropractic. In 1966 (C-66), the House of Delegates approved Report E of the Board of Trustees which spoke directly to the status of chiropractic. Although modifying statements have been adopted, no subsequent action has been found which would clearly change that position. In the opinion of the Ad Hoc Committee, the current position of the Association relative to chiropractic needs to be clarified.

5. During the discussion of physician responsibility to patients, it soon became apparent that there was a subtle difference in the doctor-patient relationship between the physician acting in a purely diagnostic role, and the physician who provides continuing care. The latter physician has an ongoing relationship and responsibility to the patient for as long as the therapy or its effects continue. The physician serving only a diagnostic role appears to have discharged responsibility to the patient once a competent report is returned to the referring entity.

The Ad Hoc Committee feels that these apparently differing responsibilities should be studied and a report submitted to the House on the appropriate role of the primarily diagnostic and the therapeutic physician.

#### **Conclusions and Recommendations**

The Committee is of the firm opinion that the Association should have a strong, broad set of Ethical Principles, maximizing individual discretion and accountability while at the same time informing the public to an uncompromising attitude to-

ward honorable behavior within the profession. While primarily for the benefit and protection of patients, such principles must clearly embrace the relationships of physicians to their colleagues and to contemporary society. No one should expect any Principles of Medical Ethics to stand unchanged forever, but by responding in a consistent fashion to a rapidly expanding and changing society, the American Medical Association can be worthy of the moment and the future.

With this goal in view, the Ad Hoc Committee presents for final action at the 1979 Interim Meeting the following version of the Principles of Medical Ethics:

#### **Principles of Medical Ethics**

**Preamble:** The medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of those whom it serves. As a member of the profession, a physician must recognize responsibilities to society, to patients, to other health professionals and to self. The following principles adopted by the American Medical Association are not laws, but standards of conduct which define the essentials of honorable behavior for the physician.

I. A physician will be dedicated to providing medically competent service with compassion and respect for human dignity.

II. A physician shall uphold the honor of the profession by dealing honestly with patients and colleagues and striving to expose those physicians deficient in character, competence, or who engage in fraud or deception.

III. A physician shall respect the law, and also recognize a responsibility to seek changes in those requirements contrary to the best interests of the patient.

IV. A physician shall respect the rights of patients, of colleagues, and of other health professionals, and shall safeguard patient confidences within the constraints of law.

V. A physician shall continue to study, apply and advance scientific knowledge, make relevant information available to the public, and utilize the talents of other health professionals when indicated.

VI. A physician, except in emergencies, shall be free to choose whom to serve, with whom to associate, and the environment in which to provide services consistent with appropriate patient care.

VII. A physician, as a member of society, shall recognize a responsibility to participate in activities contributing to an improved community.

#### **Annotations to the Principles of Medical Ethics (not to be an integral part of the Principles)**

The preamble and seven principles were developed after a thorough assessment of the prime areas of physician concern within society and the profession. They represent a logical continuum beginning with a presumption of broad responsibility, with subsequent specific statements regarding discipline, society, due process, implementation of function, reserved rights, and independent responsibility as a citizen. No one Principle can stand alone or be individually applied to a situation. In all instances, it is the conglomerate intent and influence of the Principles which shall measure ethical behavior for the physician. Interpretation and application of these Principles are the prerogatives of the Judicial Council.

**Preamble:** This language establishes broad areas of responsibilities for all physicians, and reaffirms the belief that ethical standards are for the benefit of the patient. To allow for maximal individual discretion and accountability, these statements

are clearly guidelines open to interpretation and universal application.

I. A concise statement of mission emphasizing the magnitude of a physician's commitment, and how it shall be met.

II. This wording is a clear mandate for self-discipline, calling on the precepts of fairness and honesty toward all. The deceitful are to be exposed, the impaired helped, and the unscientific educated.

III. Society should expect obedience to laws properly enacted, but the dedication of a physician requires lawful disagreement and attempts at modification of those laws inimical to sound patient care or contrary to accepted moral behavior.

IV. Due process is constitutionally guaranteed. No one has, or should have, the ability to abridge the legally given rights of another. Similarly the professional relationship is predicated on trust, and the confidentiality of this relationship, within the constraints of the law, must be assured.

V. Effective implementation of a physician's mission depends upon the application of sound scientific concepts, the ability of the public to make intelligent health choices, both as to procedure and person, and the liberal use of consultation with other health professions as may be indicated.

VI. Within the framework of these Principles, the physician is entitled to certain rights which should not be denied if individual talents are to be developed to the fullest. Freedom of choice both by physician and patient is essential.

VII. Citizens should participate in community and societal affairs. By virtue of special training, a physician, as a citizen, may have additional value and should recognize that possibility. Whether to exercise that citizen's responsibility always has been and should remain an individual decision.

#### **Recommendation 1**

That this proposed version of the Principles of Medical Ethics be placed before this House now for final action at the Interim Meeting in December 1979.

#### **Recommendation 2**

That there should be developed by the Board of Trustees a mechanism within the House of Delegates for the ongoing evaluation and modification of ethical positions as may be required from time to time.

#### **Recommendation 3**

That the Bylaws be amended by deleting the words "the establishment of principles and" from Chapter XIII, Section A, subsection 2d (6.4011 decimalized version).

#### **Recommendation 4**

That the Judicial Council be asked to view their Opinions and Reports in consonance with this revision of the Principles of Medical Ethics, if adopted.

#### **Recommendation 5**

That this report be accepted in lieu of Resolution 36, 60, 71, 92, 121, 124, 133 and 152 and Report II of the Board of Trustees (A-78), as well as Resolution 12, 13, 24, 49, 53, 70, 88, 99 and 105 (I-78) and Report A of the Judicial Council (I-77).

#### **Recommendations, Reference Committee No. 6**

The Committee next heard lengthy discussion and debate regarding the Report of the AMA Ad Hoc Committee on the Principles of Medical Ethics. During this discussion, this Committee and those members at the committee hearing were able



to compare the 1977 edition of the AMA Principles of Medical Ethics to the currently proposed principles of medical ethics from this Ad Hoc Committee. In doing so, it is apparent that this Committee and the members testifying before it lacked appropriate information as to the reasons for the additions or deletions from the 1977 Principles of Medical Ethics to make an informed judgment. It is, therefore, the recommendation of this Committee that this report be referred back to AMA until such time that this information be obtained and disseminated to the membership before they are requested to act on it.

The Chairman of the Board was recognized and read a substitute recommendation being offered by the Board, which was subsequently amended by the House members. In final action, the House voted to delete the sentence from the Reference Committee report, "It is, therefore, the recommendation of this Committee that this report be referred back to AMA until such time that this information be obtained and disseminated to the membership before they are requested to act on it." The House further voted to insert the following:

It is therefore recommended that the Report of the Ad Hoc Committee on Medical Ethics be referred to the KMA Board of Trustees for review to determine the position of the KMA in regard to the proposed revision in the AMA Principles of Medical Ethics with the stipulation that input from the membership be sought through a committee appointed by the Board of Trustees to solicit input on the Board's behalf, prior to the Board's formal action through various forms of consultation, including hearings open to members of the Association.

## Resolution I

### Jefferson County Medical Society

WHEREAS, neurological authorities throughout the country recognize that brain death in fact represents death of the individual, and

WHEREAS, determination of death by brain criteria has been applied throughout the country, and

WHEREAS, vital organs for transplantation are only usable if removed before or immediately after cardiac standstill, and

WHEREAS, this amendment is recommended by the American Board of Neurological Surgery and the Medical-Legal Committee of the American Bar Association and is similar to law now in effect in several states, and

WHEREAS, physicians and surgeons are reluctant to apply brain death criteria in declaration of death of the individual in the absence of a statute recognizing brain death, now therefore be it

RESOLVED, that the KMA Legislative Committee recommend to the 1980 General Assembly that the Kentucky Universal Anatomical Gift Act be amended by the addition of the following:

For all purposes, a human body with irreversible cessation of total brain function according to usual and customary standards of medical practice, shall be considered dead.

#### Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered Resolution I. This Committee listened to numerous speakers addressing both sides of the issue and in Executive Committee session there was additional debate on both sides of the issue. After that debate, this Committee was unanimous in recommending adoption of

Resolution I with the following amendment. "RESOLVED" should read:

"RESOLVED, that the KMA Legislative Committee with consultation from the AMA and other appropriate interested parties recommend to the 1980 General Assembly that the Kentucky Universal Anatomical Gift Act be amended by the addition of the following:

A physician in the exercise of his professional judgement may declare an individual dead in accordance with accepted medical standards. Such declaration may be based solely on an irreversible cessation of brain function including the function of the brain stem."

Lengthy discussion was held on Resolution I, during which time numerous substitute amendments were proposed and defeated. Following discussion, the House voted in final action to adopt the report of Reference Committee No. 6 with regard to Resolution I.

## Resolution J

### Jefferson County Medical Society

WHEREAS, the Metropolitan Insurance Company, the Medicare Administrator for Kentucky, has mailed official questionnaires to the physicians in this state to determine their laboratory charges, and

WHEREAS, they have also requested information on the consultant laboratories used by Kentucky physicians and their charges, and

WHEREAS, they have even made official visits to doctors' offices to obtain this information when the mailed questionnaire was not returned, and

WHEREAS, the obligation, if any, of physicians to respond to a questionnaire and to disclose their laboratory fees should be reevaluated, now therefore be it

RESOLVED, that the Kentucky Medical Association Board of Trustees be asked to establish a committee for evaluation of the ethics involved in the disclosure of laboratory charges, and the obligation of physicians to answer official questionnaires on this subject, and be it further

RESOLVED, that KMA publish the results of this evaluation as guidance for the membership.

#### Recommendations, Reference Committee No. 6

Reference Committee No. 6 considered Resolution J. This Committee recommends adoption of Resolution J with a change in the first "RESOLVED" of deleting the words "be asked to establish a committee," and adding the words "refer to the KMA Judicial Council." The "RESOLVED" would then read:

"RESOLVED, that the Kentucky Medical Association Board of Trustees refer to the KMA Judicial Council for evaluation of the ethics involved in the disclosure of laboratory charges, and the obligation of physicians to answer official questionnaires on this subject, and be it further"

A motion was made, seconded, and carried to accept the Reference Committee's recommendations.

## Resolution O

### Fayette County Medical Society

WHEREAS, Committee Report No. 11 calls for expansion of the Rural Kentucky Medical Scholarship Program, and

WHEREAS, this expansion does not meet the long-range needs, and

WHEREAS, the 33-year track record of the Scholarship Program has been both exemplary and effective supporting 466 students, therefore be it

RESOLVED, that the Kentucky Medical Association, with the advice of the Rural Kentucky Medical Scholarship Fund Committee, encourage the next Governor and the Legislature to expand the funding as part of the general strategy to improve the availability and distribution of primary health care manpower in Kentucky.

#### Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered Resolution O, Rural Kentucky Medical Scholarship Fund. The Committee agrees with this Resolution in principle, however, we recommend that the Resolution be amended as per the suggestion of the KMA Board of Trustees so that the "RESOLVED" reads as follows:

"RESOLVED, that the Kentucky Medical Association, with the advice of the Rural Kentucky Medical Scholarship Fund Committee, encourage the expansion of the funding as part of the general strategy to improve the availability and distribution of primary health care manpower in Kentucky."

A motion was made, seconded, and carried to accept the Reference Committee's recommendations.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 6 as a whole as amended. (The motion was seconded and carried.)

Mr. Speaker, I would like to thank the members of the Reference Committee, Doctors D. Kay Clawson, C. Douglas LeNeave, R. D. Pitman, and especially Edward N. Maxwell for presenting and defending this report in my absence.

#### REFERENCE COMMITTEE NO. 6

Don E. Cloys, M.D., Richmond, Chairman

D. Kay Clawson, M.D., Lexington

C. Douglas LeNeave, M.D., Mayfield

Edward N. Maxwell, M.D., Louisville

R. D. Pitman, M.D., Williamsburg

## Unfinished Business

Doctor Crowder recognized William T. Watkins, M.D., Chairman of the KMA Board of Trustees. Doctor Watkins moved, on behalf of the Board of Trustees, that the name of E. C. Seeley, M.D., Lexington, be placed in nomination for re-election to a full four-year term on the KMA Judicial Council. The motion was seconded from the floor and carried.

#### Election of Officers

Glenn U. Dorroh, M.D., Lexington, Chairman of the Tellers Committee, proceeded to the podium to announce the results of the election for President-Elect and Vice President. He announced the winners as follows:

President-Elect

Frank R. Pitzer, M.D.

Hopkinsville

Vice President

Richard J. Menke, M.D.

Crestview Hills

Doctor Crowder asked Fred C. Rainey, M.D., Past President, to escort Doctor Pitzer to the podium, and the new President-Elect briefly addressed the House. The Speaker then asked Doctor Rainey to escort Doctor Menke to the podium, who also made several remarks.

Doctor Dorroh continued with the list of those selected to fill general offices:

AMA Delegates (2)

David B. Stevens, M.D.

Louisville

Fred C. Rainey, M.D.

Elizabethtown

AMA Alternate

Lee C. Hess, M.D.

Delegates (2)

Florence

Wally O. Montgomery, M.D.

Paducah

Doctor Dorroh then submitted the following nominations for the offices of Trustee and Alternate Trustee on behalf of the district nominating committees:

Second District

R. J. Phillips, M.D.

Owensboro

Alternate

Albert H. Joslin, M.D.

Owensboro

Seventh District

William P. McElwain, M.D.

Lawrenceburg

Alternate

Cecil D. Martin, M.D.

Carrollton

Eighth District

Robert E. Smith, M.D.

(two years)

Covington

Alternate

William R. Yates, M.D.

(two years)

Hebron

Ninth District

Don R. Stephens, M.D.

Cynthiana

Alternate

R. Kendall Brown, M.D.

Georgetown

Tenth District

Richard F. Hench, M.D.

Lexington

Alternate

Colby N. Cowherd, M.D.

Lexington

Thirteenth District

Howard B. McWhorter, M.D.

Ashland

Alternate

Ranjit Sinha, M.D.

Morehead

Third District

Henry R. Bell, M.D.

(one year)

Elkton

Alternate

Sam H. Traugher, M.D.

(one year)

Hopkinsville

It was moved and seconded that the above slate of nominees be elected. Motion carried.



#### **Election of 1980 Nominating Committee**

The following physicians were elected by the House of Delegates to serve as the Nominating Committee for the 1980 Annual Meeting:

Thomas M. Marshall, M.D., Louisville, Chairman

James A. Baumgarten, M.D., Owensboro

James S. Brashear, M.D., Central City

Cecil D. Martin, M.D., Carrollton

C. Kenneth Peters, M.D., Jeffersontown

It was announced that the Board of Trustees would hold its reorganizational meeting on Thursday at noon in the Jeffersonian Room of the Ramada Inn.

Doctor Crowder adjourned the second session of the 1979 House of Delegates at 10:30 p.m.



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Madison/Somerset

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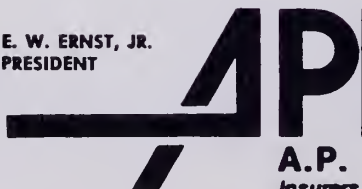
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# 1979 CONSTITUTION AND BYLAWS OF THE KENTUCKY MEDICAL ASSOCIATION

Revised September 27, 1979

## CONSTITUTION

|               |   |
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| Article I.    | Name of the Association                     |
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### Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

### Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

### Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

### Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

### Articles V. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, a Vice-President,

a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

### Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component county societies in such a manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. All other Past Presidents and Vice-Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

### Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

### Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem

appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

#### Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

#### Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary-Treasurer, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary-Treasurer to the President and Board of Trustees.

#### Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

#### Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

#### Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

## BYLAWS

- Chapter I. Membership
- Chapter II. Annual and Special Meetings of the Association
- Chapter III. The House of Delegates
- Chapter IV. Election of Officers
- Chapter V. Duties of Officers
- Chapter VI. Board of Trustees
- Chapter VII. Discipline—The Judicial Council
- Chapter VIII. Standing Committees and Councils
- Chapter IX. Assessments and Expenditures
- Chapter X. Rules of Conduct
- Chapter XI. Rules of Order
- Chapter XII. County Societies
- Chapter XIII. Amendments

### CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Life, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.



(b) Life Members. Component societies may elect as a member-life any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Life members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) In-Training Members. Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have complied with all pertinent regulations of the Kentucky State Board of Medical Licensure. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.

(2) Dentists may be invited to become Associate members.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from October 15 to October 14 of the next year. Student members may not hold office but may be voting members of any committee to which they are appointed. They will be represented in the House of Delegates through one voting representative, a student member of KMA elected by the student body at the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all

publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

## CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

### CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary-Treasurer shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the Constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately

after the resolution has been introduced, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Davies, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.



No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

#### CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice-President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years, with the provision that no more than one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary-Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to

serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nomi-

nating Committee makes its report to the House of Delegates.

#### CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary-Treasurer shall advise the Executive Vice President in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Vice President or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When

one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

#### CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates and Alternate Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement



but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

**Section 4.** The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

**Section 5.** The Journal of the Kentucky Medical Association shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the Journal shall be elected by the Board. All money received by the Journal or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

**Section 6.** All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

**Section 7.** In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

**Section 8.** The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

**Section 9.** The Board shall employ an Executive Vice President whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Vice President shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

## CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

**Section 1.** There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or a Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

**Section 2.** The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of

Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

**Section 3.** It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In the case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

**Section 4.** The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

**Section 5.** Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

**Section 6.** Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary

problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

**Section 7.** The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

**Section 8.** District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation, the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recommendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

**Section 9.** Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

**Section 10.** No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judicial Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

#### CHAPTER VIII. COMMITTEES AND COMMISSIONS

**Section 1.** The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications



and public service, and governmental medical services.

**Section 2.** The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

**Section 3.** The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary, ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

**Section 4.** No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

#### CHAPTER IX. ASSESSMENTS AND EXPENDITURES

**Section 1.** The annual dues for membership in this Association shall be as follows: (1) Active Members, \$225; (except those physicians elected to KMA membership within six months of the completion of their residency, fellowship or fulfillment of government-obligated service shall pay \$112.50 their first full year of membership); (2) Life Members, no dues; (3) Associate Members, \$25; (4) In-Training Members, \$20; (5) Inactive Members, \$25; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary-Treasurer of this Association as of the first day of January each year.

**Section 2.** Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

**Section 3.** All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

#### CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

#### CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the

latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

#### CHAPTER XII. COUNTY SOCIETIES

**Section 1.** Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to evoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

**Section 2.** As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

**Section 3.** Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

**Section 4.** In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolution, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 11 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

**Section 5.** Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

**Section 6.** Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

**Section 7.** When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

**Section 8.** A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

**Section 9.** Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

**Section 10.** Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unostentatiously given to such members.

**Section 11.** At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

**Section 12.** The secretary of each component society shall keep a roster of its members and a list of non-affiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

### CHAPTER XIII. AMENDMENTS

**Section 1.** These bylaws may be amended at any session of the House of Delegates by a majority vote of the delegates present at that session, provided: (1) the amendment proposed is presented in writing to the delegates thirty days prior to the session, or, (2) the amendment is introduced in writing at a regular session of the House of Delegates and considered at the following session, the vote on said amendment having been postponed definitely for a period of at least one day.

**Section 2.** An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

**Section 3.** An amendment to these bylaws may be proposed in writing by an individual delegate at the final session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final session is adjourned. Such an amendment having not been postponed definitely for a period of one day, requires a two-thirds vote.



# 1979-80 KMA COMMITTEES

## Scientific Program Committee

James A. Baumgarten, M.D., Owensboro, Chairman  
Peter C. Campbell, Jr., M.D., Louisville  
Alan K. David, M.D., Lexington  
Robert S. Howell, M.D., Louisville  
Frank R. Pitzer, M.D., Hopkinsville  
Hiram C. Polk, Jr., M.D., Louisville  
Sam H. Traughber, M.D., Hopkinsville  
Bob Kaelin, Louisville (Student)

## Scientific Exhibits Committee

Richard A. Kielar, M.D., Lexington, Chairman  
James P. Moss, M.D., Louisville  
John W. Ratliff, M.D., Lebanon  
Sibu Saha, M.D., Lexington

## Awards Committee

S. Randolph Scheen, M.D., Louisville, Chairman  
Delmas M. Clardy, M.D., Hopkinsville  
Lee C. Hess, M.D., Florence  
David A. Hull, M.D., Lexington  
Edward N. Maxwell, M.D., Louisville  
Wyatt Norvell, M.D., New Castle  
Paul J. Parks, M.D., Bowling Green

## Continuing Medical Education Committee

D. Vertrees Hollingsworth, M.D., Georgetown, Chairman  
Charles M. Brohm, M.D., Louisville  
Andrew Bustin, M.D., Frankfort  
Alan K. David, M.D., Lexington  
Henry D. Garretson, M.D., Louisville  
Stuart Graves, Jr., M.D., Louisville  
Allen E. Grimes, Jr., M.D., Lexington  
Thomas S. Hutsell, M.D., Louisville  
Arthur H. Keeney, M.D., Louisville  
Frank R. Lemon, M.D., Lexington  
Sally S. Mattingly, M.D., Lexington  
Hiram C. Polk, M.D., Louisville  
Bob Powell, M.D., Louisville  
James E. Redmon, Jr., M.D., Louisville  
J. David Richardson, M.D., Louisville  
Joseph E. Roe, M.D., Madisonville  
Nelson B. Rue, M.D., Bowling Green  
Charles R. Sachatello, M.D., Lexington  
Paul J. Sides, M.D., Lancaster  
William J. Temple, M.D., Covington  
Sam H. Traughber, M.D., Hopkinsville  
Max E. Wheeler, M.D., Ashland  
William R. Yates, M.D., Hebron  
Chris Ford, Louisville (Student)

## Ex-Officio:

Gerald Swim, Louisville  
KHA Representative

## Cancer Committee

R. Raphael Caffrey, M.D., Lexington, Chairman  
William M. Christopherson, M.D., Louisville  
Bob M. DeWeese, M.D., Louisville  
Laman A. Gray, Sr., M.D., Louisville  
Kenneth R. Hauswald, M.D., Ashland  
C. Hernandez, M.D., Frankfort  
Yosh Maruyama, M.D., Lexington  
William R. Meeker, M.D., Lexington  
Joseph L. Milburn, M.D., Madisonville  
Condict Moore, M.D., Louisville  
Lynn L. Ogden, M.D., Louisville  
George B. Sanders, M.D., Louisville  
George R. Tanner, M.D., Fort Thomas  
Max E. Wheeler, M.D., Ashland  
Paul G. Young, M.D., Lexington  
Alvin Martin, Louisville (Student)

## Ex-Officio:

Wayne B. Miller, Louisville  
Mary Ann Rand, R.N., Louisville  
Colonel Charles Tucker, Louisville

## Maternal Mortality Study Committee

John W. Greene, M.D., Lexington, Chairman  
Roger D. Akers, M.D., Wheelwright  
John W. Ambach, Sr., M.D., Louisville  
Gordon D. Betts, M.D., Somerset  
Stephen M. Bobys, M.D., Lexington  
Glenn W. Bryant, M.D., Louisville  
Joseph F. Daughtery, M.D., Florence  
Arthur J. Donovan, Jr., M.D., Louisville  
David L. Douglas, M.D., Frankfort  
William D. Durham, M.D., Louisville  
Jerry T. Hart, M.D., Hopkinsville  
D. Vertrees Hollingsworth, M.D., Georgetown  
Robert L. Houston, Jr., M.D., Eminence  
Victor J. Magary, M.D., Ludlow  
Terrell D. Mays, M.D., Elizabethtown  
Clarence J. McGruder, M.D., Henderson  
Charles R. Oberst, M.D., Louisville  
John A. Petry, M.D., Louisville  
R. D. Pitman, M.D., Williamsburg  
John T. Queenan, M.D., Louisville  
Roy M. Slezak, M.D., Bowling Green  
James F. Williamson, M.D., Ashland  
Walter M. Wolfe, Jr., M.D., Louisville  
Kay Kirkpatrick, Louisville (Student)

## Committee on Maternal and Child Health

Van R. Jenkins, M.D., Lexington, Chairman  
Duncan R. Campbell, M.D., Hopkinsville  
Danny M. Clark, M.D., Somerset  
Larry N. Cook, M.D., Louisville  
Guy Cunningham, M.D., Ashland  
William D. Hacker, M.D., Corbin

D. Vertrees Hollingsworth, M.D., Georgetown  
 John L. Jenkins, M.D., Henderson  
 William H. Keller, M.D., Frankfort  
 Paul G. Kyker, M.D., Lexington  
 Ronald J. Lubbe, M.D., Fort Mitchell  
 Patricia Nicol, M.D., Frankfort  
 Clinton Ray Potts, M.D., Louisville  
 Joan E. Rider, M.D., Lexington  
 Roger J. Shott, M.D., Louisville  
 Paul J. Sides, M.D., Lancaster  
 Charles B. Spalding, M.D., Bardstown  
 Charles W. Taylor, M.D., Lexington  
 Walter H. Zukof, M.D., Louisville  
 Bobby C. Baker, Louisville (Student)

#### **Hospital Committee**

Royce E. Dawson, M.D., Owensboro, Chairman  
 R. Burke Casper, M.D., Louisville  
 Hal E. Houston, Jr., M.D., Murray  
 Laszlo Makk, M.D., Louisville  
 John D. Perrine, M.D., Lexington  
 Oliver R. Roth, M.D., Ashland  
 Jo Anne Sexton, M.D., Hazard

#### **Committee on Medical Insurance and Prepayment Plans**

(To be appointed by the Board in December)

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2. Drinking to handle problems or relieve symptoms.
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4. Surreptitious drinking or gulping of drinks.
5. Tendency toward making alibis and weak excuses for drinking.
6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.
7. Frequent absenteeism from the job, especially following weekends and holidays.
8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.
9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.
10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.
11. Multiple contacts with the health care system with disorders that are alcohol caused or related.
12. Persistent marital and family problems, perhaps with multiple marriages.
13. History of arrests for drunkenness or drunken driving.

*Submitted by the KMA Committee on Physicians' Health*

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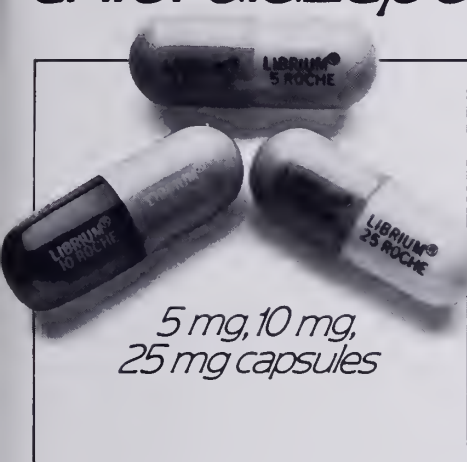
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**Precautions:** In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and

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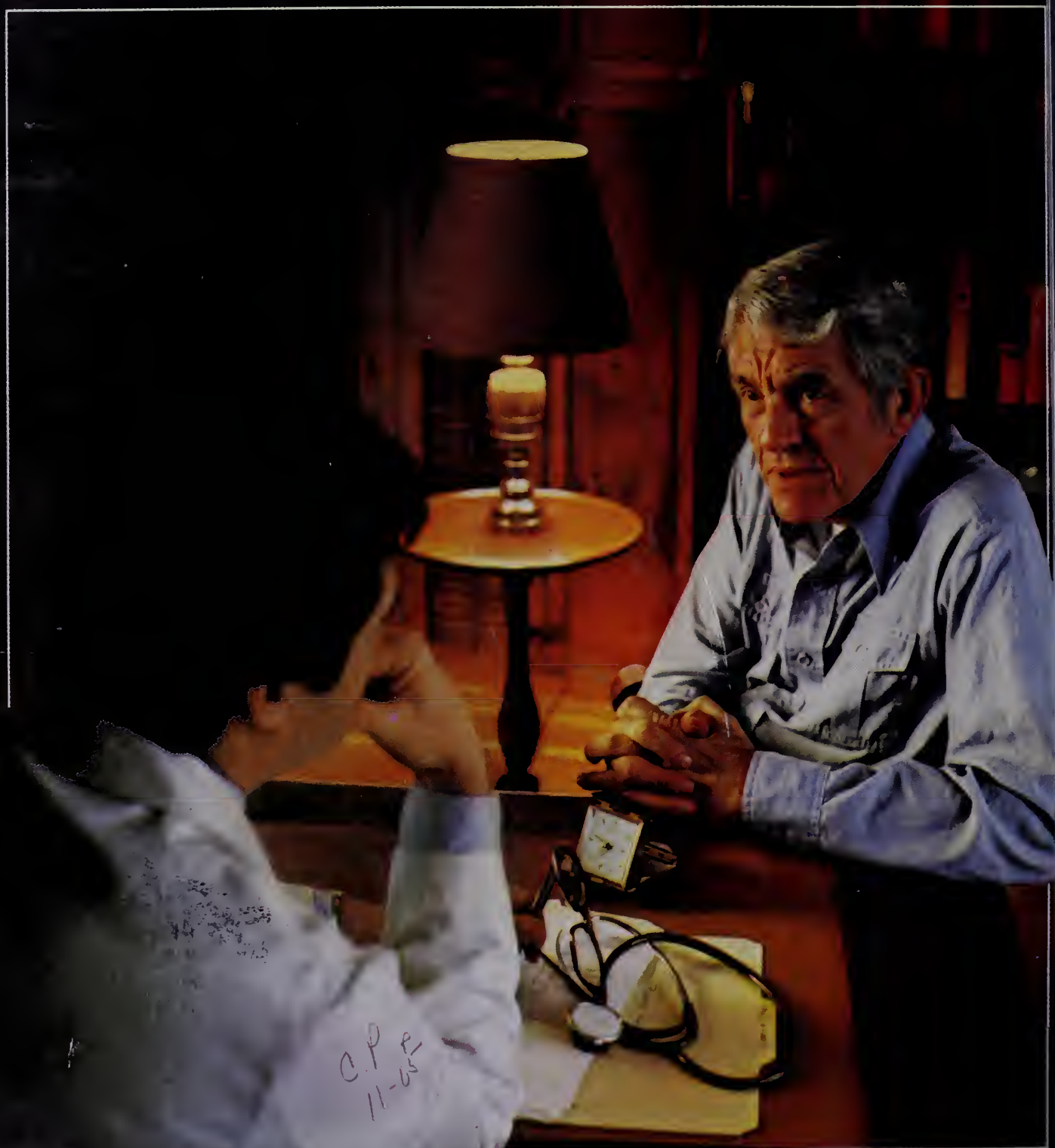
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